Pioneer

Operation Manual

FLASH MEMORY MULTIMEDIA AV NAVIGATION
RECEIVER

AVIC-Z110BT

Notice to all users:
This software requires that the navigation system is properly connected to your vehicle's parking brake and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800) 421-1404.

HD Radio®
READY

SUPER TUNER III D

English

Contents

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. *After you have finished reading the instructions, keep this manual in a safe place for future reference.*

Important

The screens shown in the examples may differ from actual screens.
Actual screens may be changed without notice for performance and function improvements.

01 Introduction

Information to User 9
License Agreement 10
- PIONEER AVIC-Z110BT - for U.S.A. 10
- PIONEER AVIC-Z110BT - for Canada 12
- Terms and Conditions for the Tele Atlas Data 14
- Licenses 17

About the database 22
- About the Data for the Map Database 22
- Copyright Notices for North American data 22

Important Safety Information 23
- "GOOG-411" service 24

Additional Safety Information 24
- Parking brake interlock 24
- When using a display connected to REAR MONITOR OUTPUT 25
- To avoid battery exhaustion 25
- Rear view camera 25

Notes Before Using the System 25
- Failure to operate 25
- Visit Our Web site 26

Manual overview 26
- How to use this manual 26
- Terminology 26
- Definitions of terminology 27

Notice regarding video viewing 27
Notice regarding DVD-Video viewing 27
Notice regarding MP3 file usage 27
iPod compatibility 27
Map coverage 28
Protecting the LCD panel and screen 28
Notes on internal memory 28
- Before removing the vehicle battery 28
- Data subject to erasure 28

02 Basic operation

Checking part names and functions 29
Adjusting the LCD panel angle 30
Inserting and ejecting a disc 30
- Inserting a disc 31
- Ejecting a disc 31

Inserting and ejecting an SD memory card 31
- Inserting an SD memory card 31
- Ejecting an SD memory card 32

Plugging and unplugging a USB storage device 32
- Plugging in a USB storage device 33
- Unplugging a USB storage device 33

Connecting and disconnecting an iPod 33
- Connecting your iPod 33
- Disconnecting your iPod 33

Flow from startup to termination 33
On first-time startup 34
Regular startup 34

03 How to use the navigation menu screens

Screen switching overview 36
What you can do on each menu 37
Operating list screens (e.g. POI list) 37
Shortcut Menu 37
- Selecting the Shortcut 38
- Canceling the Shortcut 38

Displaying the rear view camera image 38

04 How to use the map

How to read the map screen 39
- Displaying the AV information bar 40
- Enlarged map of the intersection 41
- Display during freeway driving 41

Operating the map screen 41
- Changing the scale of the map 41
- Switching the map orientation 41

  - Scrolling the map to the position you want to see 42
  - Quick Access 42

05 **Customizing the map screen settings**
- Setting the Item on the Map Screen 44
  - Setting “Close Up View” 44
  - City Map 44
  - Setting the switching of the city map display 44
  - Show Traffic Incident 45
  - Bluetooth Connected 45
  - Setting the current street name display 45
  - Setting the Favorites icon display 45
  - 3D Land Mark 45
  - Displaying maneuvers 45
  - MSN Direct 46
- Displaying POI on the map 46
  - Displaying preinstalled POIs on the map 46
  - Displaying the customized POIs 47
- Switching the view mode 47
- Setting the map color change between day and night 48
- Changing the road color 48
- Changing the setting of navigation interruption screen 49
- Selecting “Quick Access” 49

06 **Setting a route to your destination**
- The basic flow of creating your route 50
- Checking the location on the map 50
- Checking the calculated route 50
  - Display multiple routes 51
  - Modifying the route calculation conditions 51
  - Checking the current itinerary 52
  - Adding a waypoint 52

07 **Checking and modifying the current route**
- Checking the current itinerary 54
- Editing waypoints 54
  - Adding a waypoint 54
  - Deleting a waypoint 55
  - Sorting waypoints 55
- Modifying the route calculation conditions 55
- Canceling the route guidance 56

08 **Searching for and selecting a location**
- Searching for a location by address 57
  - Searching for a city name first 57
  - Finding the location by specifying the house number 58
  - Searching for a name by entering multiple keywords 59
- Setting up a route to your home 59
- Searching for Points of Interest (POI) 60
  - Searching for POIs by specifying a category first 60
  - Searching for a POI directly from the name of the facilities 60
  - Searching for a nearby POI 60
  - Searching for POIs around the destination 61
  - Searching for POIs around the city 61
- Selecting destination from “Favorites” 61
- Searching for POIs by using the data on the SD memory card 62
- Selecting a location you searched for recently 62
- Searching for a location by coordinates 62

09 **Registering and editing locations**
- Registering a location into “Favorites” 64
  - Registering a location by “Favorites” 64
  - Registering a location by scroll mode 64
- Editing registered locations 64
  - Editing the entry in “Favorites” 64
  - Editing your home 65
  - Sorting the entry in “Favorites” 65
  - Deleting the entry in “Favorites” 65
- Exporting and importing the entry in “Favorites” 66

  - Exporting the entry in “Favorites” **66**
  - Importing the “Favorites” items edited on AVIC FEEDS **66**
- Deleting an entry in “History” **67**

⑩ Browsing information on MSN Direct

- Activating the service **68**
  - Checking your product key **68**
  - Subscribing to the MSN Direct service **69**
  - Activating the MSN Direct function **69**
- Browsing gas prices **69**
- Browsing movie times **70**
  - Searching for a theater by selecting a movie title **70**
  - Searching for a movie title by selecting a theater **71**
- Browsing weather information **71**
  - Checking the local weather information **71**
  - Checking worldwide weather conditions **72**
- Using traffic information **72**
  - Viewing the traffic event **72**
  - Checking traffic information on the route **73**
  - How to read traffic information on the map **73**
  - Setting an alternative route to avoid traffic congestion **74**
  - Viewing the traffic flow **75**
  - Selecting traffic information to display **76**
- Browsing local events **76**
- Browsing news headlines **77**
- Browsing stock quotes **78**
  - Selecting stock symbols **78**
  - Viewing the detailed stock quotes **78**

⑪ Registering and connecting the Bluetooth device

- Preparing communication devices **79**
- Registering your Bluetooth devices **79**
  - Searching for nearby Bluetooth devices **79**
  - Searching for a specified Bluetooth device **80**
  - Pairing from your Bluetooth devices **81**
  - Deleting a registered device **82**
- Connecting a registered Bluetooth device **82**

⑫ Using hands-free phoning

- Displaying the Phone Menu **84**
- Making a phone call **84**
  - Direct dialing **84**
  - Making a call home easily **85**
  - Calling a number in the “Contacts List” **85**
  - Making a phone call using the received call history **85**
  - Making a phone call using the dialed number history **86**
  - Making a phone call using missed call history **86**
  - Dialing GOOG-411 **87**
  - Dialing the entry in the “Favorites” **87**
  - Dialing a facility’s phone number **87**
  - Dialing from the map **87**
- Receiving a phone call **88**
  - Answering an incoming call **88**
  - Rejecting an incoming call **88**
- Transferring the phone book **89**
- Changing the phone settings **89**
  - Editing the device name **90**
  - Editing the password **90**
  - Stopping Bluetooth wave transmission **90**
  - Echo canceling and noise reduction **90**
  - Answering a call automatically **90**
  - Setting the automatic rejection function **91**
  - Clearing memory **91**
  - Updating the Bluetooth wireless technology software **91**

Notes for hands-free phoning 92

⑬ **Customizing preferences**
The options in the “Navi Settings” menu 94
- Displaying the “Navi Settings” screen 94
- Checking the connections of leads 94
- Checking sensor learning status and driving status 94
- Using the “Gas Mileage” function 96
- Recording your travel history 97
- Using the demonstration guidance 98
- Registering your home 98
- Correcting the current location 98

Options on the “System Settings” menu 98
- Displaying the “System Settings” screen 98
- Customizing the regional settings 99
- Setting the Volume for Guidance and Phone 100
- Changing the splash screen 101
- Changing to the splash screen stored in the SD memory card 101
- Setting for rear view camera 101
- Adjusting the response positions of the touch panel (touch panel calibration) 102
- Setting the illumination color 103
- Checking the version information 103

Replicating the settings 103
Turning off the screen 104

⑭ **Using the radio (FM)**
Reading the screen 105
Using the touch panel keys 105
- Switching between the detailed information display and the preset list display 106
- Storing and recalling broadcast frequencies 106

Using the “Function” menu 106
- Storing the strongest broadcast frequencies 106
- Tuning in strong signals 107

⑮ **Using the radio (AM)**
Reading the screen 108
Using the touch panel keys 108
- Switching between the detailed information display and the preset list display 108
- Storing and recalling broadcast frequencies 109

Using the “Function” menu 109
- Storing the strongest broadcast frequencies 109
- Tuning in strong signals 109

⑯ **HD Radio™ Reception**
Reading the screen 110
Using the touch panel keys 110
- Switching between the detailed information display and the preset list display 111
- Storing and recalling broadcast frequencies 111

Switching the display 111
Using the “Function” menu 111
- Storing the strongest broadcast frequencies 112
- Switching the seek mode 112
- Tuning in strong signals 112
- Switching the reception mode 112

⑰ **Playing audio CDs**
Reading the screen 113
Using the touch panel keys 113
Selecting a track from the list 114
Using the “Function” menu 114

⑱ **Playing music files on ROM**
Reading the screen 115
Using the touch panel keys 116
- Selecting a track from the list 116

Using the “Function” menu 116

⑲ **Playing a DVD-Video**
Reading the screen 118
Using the touch panel keys 118
- Resuming playback (Bookmark) 119

  - Searching for a specific scene and starting playback from a specified time 120
  - Direct number search 120
  - Operating the DVD menu 120
  - Using DVD menu by touch panel keys 120
  - Frame-by-frame playback 121
  - Slow motion playback 121
- Using the “Function” menu 121

⑳ Playing a DVD-VR disc

- Reading the screen 123
- Using the touch panel keys 123
  - Searching for a specific scene and starting playback from a specified time 124
  - Switch the playback mode 125
  - Using the short-time skip function 125
  - Playing by selecting from the title list 125
  - Frame-by-frame playback 125
  - Slow motion playback 125
- Using the “Function” menu 126

㉑ Playing a DivX video

- Reading the screen 127
- Using the touch panel keys 127
  - Frame-by-frame playback 128
  - Slow motion playback 128
  - Searching for a specific scene and starting playback from a specified time 128
  - Playing by selecting from the title list 129
- Using the “Function” menu 129

㉒ DVD-Video, DVD-VR, DivX setup

- Displaying DVD/DivX® Setup menu 130
- Setting the top-priority languages 130
- Setting the angle icon display 130
- Setting the aspect ratio 130
- Setting the parental lock 131
  - Setting the code number and level 131
- Setting “Auto Play” 131
- Setting the subtitle file for DivX 132
- Language code chart for DVDs 133

㉓ Playing music files (from USB or SD)

- Starting procedure 134
- Reading the screen 134
- Using the touch panel keys (Music) 135
  - Selecting a track from the list 135
- Using the “Function” menu 136

㉔ Playing video files (from USB or SD)

- Starting procedure 137
- Reading the screen 137
- Using the touch panel keys (Video) 137
  - Playing by selecting from the title list 138
  - Searching for a specific scene and starting playback from a specified time 138
- Using the “Function” menu 139

㉕ Using an iPod (iPod)

- Starting procedure 140
- Reading the screen 140
- Using the touch panel keys (Music) 141
  - Browsing for a song 141
- Operating this navigation system's iPod function from your iPod 142
- Starting the video playback 142
- Using the touch panel keys (Video) 143
  - Browsing for a video 143
- Using the “Function” menu 144

㉖ Using the Bluetooth audio player

- Reading the screen 146
- Using the touch panel keys 147
- Using the “Function” menu 147

㉗ Using the XM tuner

- Reading the screen 148
- Using the touch panel keys 149
  - Selecting an XM channel directly 149

  - Displaying the Radio ID **149**
  - Storing and recalling broadcast stations **150**
  - Selecting a channel from the list **150**
  - Using “My Mix” function **150**
  - Using the direct traffic announcement function **151**
- Using the “Function” menu **151**
  - Setting the memorized songs **152**

㉘ Using the SIRIUS tuner

- Reading the screen **153**
- Using the touch panel keys **153**
  - Selecting a SIRIUS channel directly **154**
  - Display the Radio ID **154**
  - Storing and recalling broadcast stations **155**
  - Using “My Mix” function **155**
  - Using the direct traffic announcement function **155**
  - Using the “Instant Replay” function **156**
- Using the “Function” menu **156**
  - Setting the memorized songs **156**
  - Using the Game Alert function **157**
  - Displaying Game Information **157**

㉙ Using AV input

- Using AV1 **158**
- Using AV2 **158**
- Using the touch panel keys **158**

㉚ Using the external unit (EXT1, EXT2)

- Reading the screen **159**
- Using the touch panel keys **159**

㉛ Other functions

- Selecting the video for “Rear display” **160**
- Operating the picture adjustment **160**

㉜ Customizing preferences

- Options on the “AV System Settings” menu **162**
  - Displaying the “AV System Settings” menu **162**
  - Setting video input 1 (AV1) **162**
  - Setting video input 2 (AV2) **162**
  - Switching the auto antenna setting **162**
  - Changing the wide screen mode **163**
  - Setting the rear output **163**
  - Switching the muting/attenuation timing **163**
  - Switching the muting/attenuation level **164**
  - Changing the voice output of the navigation guidance **164**
  - Acquiring/Cataloging iPod music information **164**
  - Displaying your DivX VOD registration code **165**
- The “AV Sound Settings” menu options **165**
  - Displaying the “AV Sound Settings” menu **165**
  - Using balance adjustment **166**
  - Using the equalizer **166**
  - Adjusting loudness **168**
  - Using subwoofer output **168**
  - Using the high pass filter **168**
  - Adjusting source levels **168**
  - Enhancing bass (Bass Booster) **169**
  - Setting the simulated sound stage **169**

㉝ Operating Your Navigation System with Voice

- To Ensure Safe Driving **170**
- Basics of Voice Operation **170**
  - Flow of voice operation **170**
  - Starting voice operation **170**
  - How to use the voice operation **170**
- Available Basic Voice Commands **172**
  - Basic commands **172**
  - Voice operation for the iPod **172**
  - Voice operation for AV source (other than iPod) **174**

  - Voice commands related to hands-free phoning 175
- Tips for Voice Operation 176

34 Other functions

- Setting the anti-theft function 177
  - Setting the password 177
  - Entering the password 177
  - Deleting the password 177
  - Forgotten password 177
- Restoring the default setting 178
- Returning the navigation system to the initial state 178
- Returning the navigation system to the default or factory settings 178
  - Setting items to be deleted 179

Appendix

- Troubleshooting 181
- Messages and how to react to them 186
- Messages for audio functions 188
- Positioning technology 190
  - Positioning by GPS 190
  - Positioning by “Dead Reckoning” 190
  - How do GPS and “Dead Reckoning” work together? 190
- Handling large errors 191
  - When positioning by GPS is impossible 191
  - Conditions likely to cause noticeable positioning errors 192
- Route setting information 193
  - Route search specifications 193
- Handling and care of discs 194
  - Built-in drive and care 195
  - Ambient conditions for playing a disc 195
- Playable discs 195
  - DVD-Video and CD 195
  - AVCHD recorded discs 195
  - Playing DualDisc 196
  - Dolby Digital 196
  - DTS sound 196
- Detailed information for playable media 196
  - Compatibility 196
  - Media compatibility chart 199
- Bluetooth 202
- About the SAT RADIO READY Logo 203
- HD Radio™ Technology 203
- SD and SDHC logo 203
- WMA/WMV 203
- DivX 203
- AAC 204
- Detailed information regarding connectable iPods 204
  - iPod 204
  - iPhone 205
  - iTunes 205
- Using the LCD screen correctly 205
  - Handling the LCD screen 205
  - Liquid crystal display (LCD) screen 205
  - Maintaining the LCD screen 205
  - LED (light-emitting diode) backlight 205
- Display information 207
  - Destination Menu 207
  - Phone Menu 207
  - Settings Menu 207
- Glossary 211
- Specifications 214

Information to User

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

FCC ID : AJDK026
IC : 775E-K026
This device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.
MADE IN THAILAND

For Canadian model
This Class B digital apparatus complies with Canadian ICES-003.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated with at least 20 cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

CAUTION:
USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
CAUTION:
THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

⚠ WARNING

Handling the cord on this product or cords associated with accessories sold with the product may expose you to chemicals listed on proposition 65 known to the State of California and other governmental entities to cause cancer and birth defect or other reproductive harm. ***Wash hands after handling.*** ■

License Agreement

PIONEER AVIC-Z110BT - for U.S.A.

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS (USA) INC. ("PIONEER"). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER(S) ("SUPPLIERS"), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS' SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 14). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1 GRANT OF LICENSE

Pioneer grants to you a non-transferable, non exclusive license to use the software installed on the Pioneer products (the "Software") and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products.
You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive or attempt to derive the source code or structure of all or any portion of the Software by reverse engineering, disassembly, decompilation, or any other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.
Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software.
You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2 DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you "AS IS". PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as "Pioneer") MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error free or uninterrupted, or that all non-conformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3 LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST INCOME, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ANY AND ALL CAUSES OF ACTION INDIVIDUALLY OR IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4 EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside the United States except as authorized and as permitted by the laws and regulations of the United States. If the Software has been rightfully obtained by you outside of the United States, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of the United States and the laws and regulations of the jurisdiction in which you obtained the Software.

5 TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6 U.S. GOVERNMENT END USERS

If the Software is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, the Data is licensed with "Limited Rights". Utilization of the Software is subject to the restrictions specified in the "Rights in Technical Data" clause at DFARS 252.227-7013, or the equivalent clause for non-defense agencies. Pioneer Electronics (USA) Inc., 2265 East 220th Street, Long Beach, CA 90810.

7 MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the State of California. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect.

PIONEER AVIC-Z110BT - for Canada

THIS IS A LEGAL AGREEMENT BETWEEN YOU, AS THE END USER, AND PIONEER ELECTRONICS OF CANADA, INC. (“PIONEER”). PLEASE READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS. BY USING THE SOFTWARE INSTALLED ON THE PIONEER PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. THE SOFTWARE INCLUDES A DATABASE LICENSED BY THIRD PARTY SUPPLIER (S) (“SUPPLIERS”), AND YOUR USE OF THE DATABASE IS COVERED BY THE SUPPLIERS’ SEPARATE TERMS, WHICH ARE ATTACHED TO THIS AGREEMENT (Refer to page 14). IF YOU DO NOT AGREE WITH ALL OF THESE TERMS, PLEASE RETURN THE PIONEER PRODUCTS (INCLUDING THE SOFTWARE, AND ANY WRITTEN MATERIALS) WITHIN FIVE (5) DAYS OF RECEIPT OF THE PRODUCTS, TO THE AUTHORIZED PIONEER DEALER FROM WHICH YOU PURCHASED THEM. USE OF THE SOFTWARE SHALL BE DEEMED TO BE YOUR CONSENT TO THE LICENSE AGREEMENT.

1 GRANT OF LICENSE

Pioneer grants to you a non-transferable, non exclusive license to use the software installed on the Pioneer products (the “Software”) and the related documentation solely for your own personal use or for internal use by your business, only on such Pioneer products.

You shall not copy, reverse engineer, translate, port, modify or make derivative works of the Software. You shall not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the Software or use it in any manner not expressly authorized by this agreement. You shall not derive, or attempt to derive, the source code or structure of all or any portion of the Software by reverse engineering, disassembly, decompilation, or any other means. You shall not use the Software to operate a service bureau or for any other use involving the processing of data for other persons or entities.

Pioneer and its licensor(s) shall retain all copyright, trade secret, patent and other proprietary ownership rights in the Software. The Software is copyrighted and may not be copied, even if modified or merged with other products. You shall not alter or remove any copyright notice or proprietary legend contained in or on the Software.

You may transfer all of your license rights in the Software, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement.

2 DISCLAIMER OF WARRANTY

The Software and related documentation are provided to you “AS IS”. PIONEER AND ITS LICENSOR(S) (for the purpose of provisions 2 and 3, Pioneer and its licensor(s) shall be collectively referred to as “Pioneer”) MAKES AND YOU RECEIVE NO WARRANTY FOR THE SOFTWARE, WHETHER EXPRESS OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE FOR THE SOFTWARE ARE EXPRESSLY EXCLUDED. SOME STATES DO NOT ALLOW EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. The Software is complex and may contain some nonconformities, defects or errors. Pioneer does not warrant that the Software will meet your needs or expectations, that operation of the Software will be error free or uninterrupted, or that all non-conformities can or will be corrected. Furthermore, Pioneer does not make any representations or warranties regarding the use or results of the use of the Software in terms of its accuracy, reliability or otherwise.

3 LIMITATION OF LIABILITY

IN NO EVENT SHALL PIONEER BE LIABLE FOR ANY DAMAGES, CLAIM OR LOSS INCURRED BY YOU (INCLUDING, WITHOUT LIMITATION, COMPENSATORY, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, LOST PROFITS, LOST SALES OR BUSINESS, EXPENDITURES, INVESTMENTS, OR COMMITMENTS IN CONNECTION WITH ANY BUSINESS, LOSS OF ANY GOODWILL, OR DAMAGES) RESULTING FROM THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF PIONEER HAS BEEN INFORMED OF, KNEW OF, OR SHOULD HAVE KNOWN OF THE LIKELIHOOD OF SUCH DAMAGES. THIS LIMITATION APPLIES TO ALL CAUSES OF ACTION IN THE AGGREGATE, INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION, AND OTHER TORTS. IF PIONEER'S WARRANTY DISCLAIMER OR LIMITATION OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL OR FOR ANY REASON WHATSOEVER BE HELD UNENFORCEABLE OR INAPPLICABLE, YOU AGREE THAT PIONEER'S LIABILITY SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE PRICE PAID BY YOU FOR THE ENCLOSED PIONEER PRODUCT.
Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty disclaimer and limitation of liability shall not be applicable to the extent that they are prohibited by any applicable federal, state or local law which provides that such a disclaimer or limitation cannot be waived or preempted.

4 EXPORT LAW ASSURANCES

You agree and certify that neither the Software nor any other technical data received from Pioneer, nor the direct product thereof, will be exported outside Canada except as authorized and as permitted by the laws and regulations of Canada. If the Software has been rightfully obtained by you outside of Canada, you agree that you will not re-export the Software nor any other technical data received from Pioneer, nor the direct product thereof, except as permitted by the laws and regulations of Canada and the laws and regulations of the jurisdiction in which you obtained the Software.

5 TERMINATION

This Agreement is effective until terminated. You may terminate it at any time by destroying the Software. The Agreement also will terminate if you do not comply with any terms or conditions of this Agreement. Upon such termination, you agree to destroy the Software.

6 MISCELLANEOUS

This is the entire Agreement between Pioneer and you regarding its subject matter. No change in this Agreement shall be effective unless agreed to in writing by Pioneer. Pioneer retailers do not have the authority to change this Agreement. This Agreement shall be governed by and construed in accordance with the internal laws of the Province of Ontario and the federal laws of Canada applicable therein. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect.

Terms and Conditions for the Tele Atlas Data

THIS IS A LEGAL AGREEMENT (THE “AGREEMENT”) BETWEEN YOU, THE END USER, AND TELE ATLAS NORTH AMERICA, INC. (“Tele Atlas”). BY USING YOUR COPY OF THE TELE ATLAS DATA, YOU AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT.

1 ***Grant of License.***

Tele Atlas grants you a non-transferable, non-exclusive license to use the map data and business points of interest information (the “POIs”), (together, the “Data”) contained on these discs, solely for personal, non-commercial use and not to operate a service bureau or for any other use involving the processing of data of other persons or entities. You may make one (1) copy of the Data for archival or backup purposes only but you may not otherwise copy, reproduce, modify, make derivative works, derive the structure of or reverse engineer the Data. The Data contains confidential and proprietary information and materials, and may contain trade secrets, so you agree to hold the Data in confidence and in trust and not to disclose the Data or any portions in any form, including by renting, leasing, publishing, leasing, sublicensing or transferring the Data to any third party. You are prohibited from removing or obscuring any copyright, trademark notice or restrictive legend.

2 ***Ownership.***

The Data is copyrighted by Tele Atlas and its licensors and they retain all ownership rights in the Data. You agree not to alter, remove, obliterate, or obscure any copyright notice or proprietary legend contained in or on the Data.

3 ***Warranty Disclaimer.***

THE DATA IS PROVIDED ON AN “AS IS” AND “WITH ALL FAULTS BASIS” AND TELE ATLAS AND ITS SUPPLIERS EXPRESSLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, SATISFACTORY QUALITY, ACCURACY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. NO ORAL OR WRITTEN ADVICE OR INFORMATION PROVIDED BY TELE ATLAS OR ANY OF ITS AGENTS, EMPLOYEES OR THIRD PARTY PROVIDERS SHALL CREATE A WARRANTY, AND YOU ARE NOT ENTITLED TO RELY ON ANY SUCH ADVICE OR INFORMATION. THIS DISCLAIMER OF WARRANTIES IS AN ESSENTIAL CONDITION OF THE AGREEMENT.

4 ***Limitation of Liability.***

TELE ATLAS SHALL NOT BE LIABLE TO YOU FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR EXEMPLARY DAMAGES ARISING OUT OF THIS AGREEMENT, INCLUDING LOST PROFITS OR COSTS OF COVER, LOSS OF USE OR BUSINESS INTERRUPTION OR THE LIKE, REGARDLESS OF WHETHER YOU WERE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, TELE ATLAS SHALL HAVE NO MONETARY LIABILITY TO YOU FOR ANY CAUSE (REGARDLESS OF THE FORM OF ACTION) UNDER OR RELATING TO THIS AGREEMENT.

5 ***Termination.***

This Agreement will terminate immediately and automatically, without notice, if you breach any term of this Agreement. You agree that in the event of termination of the Agreement, you shall return the Data (including all documentation and all copies) to Tele Atlas and its suppliers.

6 *Indemnity.*

You agree to indemnify, defend and hold Tele Atlas, its Licensors, and its Suppliers (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives) free and harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any use or possession by you of the Data.

7 *U.S. Government Rights.*

If you are an agency, department, or other entity of the United States Government, or funded in whole or in part by the United States Government, then use, duplication, reproduction, release, modification, disclosure or transfer of this commercial product and accompanying documentation, is restricted in accordance with the LIMITED or RESTRICTED rights as described in DFARS 252.227-7014(a)(1) (JUN 1995) (DOD commercial computer software definition), DFARS 227.7202-1 (DOD policy on commercial computer software), FAR 52.227-19 (JUN 1987) (commercial computer software clause for civilian agencies), DFARS 252.227-7015 (NOV 1995) (DOD technical data – commercial items clause); FAR 52.227-14 Alternates I, II, and III (JUN 1987) (civilian agency technical data and noncommercial computer software clause); and/or FAR 12.211 and FAR 12.212 (commercial item acquisitions), as applicable. In case of conflict between any of the FAR and DFARS provisions listed herein and this License, the construction that provides greater limitations on the Government's rights shall control. Contractor/manufacturer is Tele Atlas North America, Inc., 11 Lafayette Street, Lebanon, NH 03766-1445. Phone: 603.643. 0330. The Data is ©1984-2008 by Tele Atlas. ALL RIGHTS RESERVED. For purpose of any public disclosure provision under any federal, state or local law, it is agreed that the Data is a trade secret and a proprietary commercial product and not subject to disclosure.

If you are an agency, department, or other entity of any State government, the United States Government or any other public entity or funded in whole or in part by the United States Government, then you hereby agree to protect the Data from public disclosure and to consider the Data exempt from any statute, law, regulation, or code, including any Sunshine Act, Public Records Act, Freedom of Information Act, or equivalent, which permits public access and/or reproduction or use of the Data. In the event that such exemption is challenged under any such laws, this Agreement shall be considered breached and any and all right to retain any copies or to use of the Data shall be terminated and considered immediately null and void. Any copies of the Data held by you shall immediately be destroyed. If any court of competent jurisdiction considers this clause void and unenforceable, in whole or in part, for any reason, this Agreement shall be considered terminated and null and void, in its entirety, and any and all copies of the Data shall immediately be destroyed.

8 *Additional Provisions with respect to POI Data only.*

a *No Creation of Mailing Lists.*
You are prohibited from using the POIs (i) to create mailing lists or (ii) for other such similar uses.

b *Compliance.*
You will use the POIs in compliance with all applicable federal, state and local laws, rules and regulations.

c *Indemnification.*
You shall indemnify and hold infoUSA, Inc. harmless against all third party claims or liability which are based in whole or in part of the users failure to comply with such laws, rules and regulations or which result from the use of the POIs through you.

d *Warranty.*

In addition to the Warranties contained in the Agreement, YOU UNDERSTAND THAT THE POIS ARE LICENSED ON AN “AS IS” BASIS WITHOUT GUARANTEE, AND THERE ARE NO OTHER WARRANTIES MADE WHETHER, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

e *POIs Segregation.*
You are prohibited from combining or merging the POIs with any other POI data. The POIs shall be maintained in such a way that they are separately identifiable from all other POI data at all times.

9 ***Agreement in English.***

The parties hereto confirm that they have requested that this Agreement and all attachments and related documents be drafted in English.
Les parties ont exigé que le présent contrat et tous les documents attachés soient rédigés en Anglais.

10 ***Miscellaneous.***

This is the exclusive and complete Agreement between Tele Atlas and you regarding its subject matter. Nothing in this Agreement shall create a joint venture, partnership or principal-agent relationship between Tele Atlas and you. The internal laws of California shall govern this Agreement and you consent to the jurisdiction of the Northern District of California or the State of California for the County of Santa Clara. Sections 2 – 10 shall survive the expiration or termination of this Agreement. This Agreement may be amended, altered, or modified only by Tele Atlas. You may not assign any part of this Agreement without Tele Atlas’ prior written consent. You acknowledge and understand that the Data may be subject to restrictions on exportation and agree to comply with any applicable export laws. In the event that any provision or part of a provision of this Agreement is determined to be invalid, illegal, or unenforceable, such provision or part thereof shall be stricken from this Agreement and the remainder of this Agreement shall be valid, legal, and enforceable to the maximum extent possible. Any notice under this Agreement shall be delivered by courier to Tele Atlas North America, Inc., Attention Contracts Department, 11 Lafayette Street, Lebanon, NH 03766 USA. The covenants and obligations undertaken by you herein are intended for the direct benefit of Tele Atlas and may be enforced by Tele Atlas directly against you.

Licenses

7-Zip

License for use and distribution

7-Zip Copyright (C) 1999-2007 Igor Pavlov.

Licenses for files are:
1) 7z.dll: GNU LGPL + unRAR restriction
2) All other files: GNU LGPL

The GNU LGPL + unRAR restriction means that you must follow both GNU LGPL rules and unRAR restriction rules.

Note:
You can use 7-Zip on any computer, including a computer in a commercial organization. You don't need to register or pay for 7-Zip.

GNU LGPL information

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

unRAR restriction

The decompression engine for RAR archives was developed using source code of unRAR program.
All copyrights to original unRAR code are owned by Alexander Roshal.

The license for original unRAR code has the following restriction:

> The unRAR sources cannot be used to re-create the RAR compression algorithm, which is proprietary. Distribution of modified unRAR sources in separate form or as a part of other software is permitted, provided that it is clearly stated in the documentation and source comments that the code may not be used to develop a RAR (WinRAR) compatible archiver.

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the “Lesser” General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a “work based on the library” and a “work that uses the library”. The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called “this License”).
Each licensee is addressed as “you”.

A “library” means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The “Library”, below, refers to any such software library or work which has been distributed under these terms. A “work based on the Library” means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term “modification”.)

“Source code” for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a “work that uses the Library”. Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a “work that uses the Library” with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a “work that uses the library”. The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a “work that uses the Library” uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a “work that uses the Library” with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- **a)** Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable “work that uses the Library”, as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

- **b)** Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.
You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free

Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

> <one line to give the library's name and a brief idea of what it does.>
> Copyright (C) <year> <name of author>
>
> This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.
>
> This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.
>
> You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the library, if necessary. Here is a sample; alter the names:

> Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.
>
> <signature of Ty Coon>, 1 April 1990
> Ty Coon, President of Vice

That's all there is to it!

7-Zip Source Notice

The software program used in this product contains 7-Zip library. 7-Zip contains the software granted permission for the usage under the terms of the GNU Lesser General Public License. A copy of appropriate source code is available at customer necessary expense for the distribution.
Please contact our Customer Support Center to obtain a copy. For more information on the GNU Lesser General Public License, visit the GNU’s website at http://www.gnu.org.

Portions of the software in this product are copyright 1996 – 2007 The FreeType Project (www.freetype.org).
All rights reserved. Licensed under the Free- Type Project LICENSE, 2006-Jan-27. (http://www.freetype.org/FTL.TXT)

About the database

About the Data for the Map Database

- Modifications related to roads, streets/highways, terrain, construction and other things before/during the development period may not be reflected in this database. Inevitably, those modifications after that period are not reflected in this database.
- For more details about the map coverage of this navigation system, refer to the information on our website.
- It is strictly prohibited to reproduce and use any part or the whole of this map in any form without permission from the copyright owner.
- If the local traffic regulations or conditions deviate from this data, follow the local traffic regulations (such as signs, indications, etc.) and conditions (such as construction, weather, etc.).
- The traffic regulation data used in the map database applies only to standard sized passenger vehicles. Note that regulations for larger vehicles, motorbikes, and other non-standard vehicles are not included in the database.

Copyright Notices for North American data

1. Tele Atlas® MultiNet® USA and Canada data.
   As of the Effective Date, the copyright notice for Tele Atlas® MultiNet® USA and Canada is:
   NOTICE
   © 2006 – 2008 Tele Atlas. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned or licensed to Tele Atlas. Tele Atlas is an authorized distributor of selected Statistics Canada computer files under Agreement number 6776. The product includes information copied with permission from Canadian authorities, including © Canada Post Corporation and GeoBase®, and Department of Natural Resources Canada, All rights reserved. The product is sourced in part from Geography Division, Statistics Canada, 2006 Road Network File (RNF), 92-500-XWE/XWF. The incorporation of data sources from Statistics Canada within this product shall not be construed as constituting an endorsement by Statistics Canada of such product. The use of this material is subject to the terms of a License Agreement. You will be held liable for any unauthorized copying or disclosure of this material.
2. As of the Effective Date, the copyright notice for all third-party brand icons (the “Brand Icons”) are located in the operator’s manual included in the Licensed Products.
3. As of the Effective Date, the copyright notice with logo for infoUSA, Inc. is:

   Data by
   infoUSA®
   Copyright©2009
   All Rights Reserved

4. As for Map Version, Tele Atlas. Rel. 07/2008. ■

Important Safety Information

WARNING

- Do not attempt to install or service your navigation system by yourself. Installation or servicing of the navigation system by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.
- If liquid or foreign matter should get inside this navigation system, park your vehicle to safe place and turn the ignition switch off (ACC OFF) immediately and consult your dealer or the nearest authorized Pioneer Service Station. Do not use the navigation system in this condition because doing so may result in a fire, electric shock, or other failure.
- If you notice smoke, a strange noise or odor from the navigation system, or any other abnormal signs on the LCD screen, turn off the power immediately and consult your dealer or the nearest authorized Pioneer Service Station. Using this navigation system in this condition may result in permanent damage to the system.
- Do not disassemble or modify this navigation system, as there are high-voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorized Pioneer Service Station for internal inspection, adjustments or repairs.
- Do not allow this product to come into contact with liquids. Electrical shock could result. Also, damage to the product, smoke, and overheating could result from contact with liquids.

CAUTION

- When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

Before using your navigation system, be sure to read and fully understand the following safety information:

- ❒ Read the entire manual before operating this navigation system.
- ❒ The navigation features of your navigation system (and rear view camera option if purchased) are intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.
- ❒ Do not operate this navigation system (or the rear view camera option if purchased) if doing so will divert your attention in any way from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
- ❒ Never allow others to use the system unless they have read and understood the operating instructions.
- ❒ Never use this navigation system to route to hospitals, police stations or similar facilities in an emergency. Stop using any functions relating to the hands-free phone and please call 911.
- ❒ Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.
- ❒ Traffic restrictions and advisories currently in force should always take precedence over guidance given by the navigation system. Always obey current traffic restrictions, even if the navigation system provides contrary advice.

- Failure to set correct information about the local time may result in the navigation system providing improper routing and guidance instructions.
- Never set the volume of your navigation system so high that you cannot hear outside traffic and emergency vehicles.
- To promote safety, certain functions are disabled unless the vehicle is stopped and/or the parking brake is applied.
- The data encoded in the built-in memory is the intellectual property of the provider, and the provider is responsible for such content.
- Keep this manual handy as a reference for operating procedures and safety information.
- Pay close attention to all warnings in this manual and follow the instructions carefully.
- Do not install this navigation system where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags or hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- Please remember to fasten your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- Never use headphones while driving.

"GOOG-411" service

- Pioneer does not bear responsibility for the accuracy of the information.
- Pioneer does not bear responsibility for changes to information services provided by related companies, such as cancellation of services or changing to pay-services. Also, we do not accept return of the product for this reason.

Additional Safety Information

Parking brake interlock

Certain functions (such as viewing of DVD-Video and certain touch key operations) offered by this navigation system could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the parking brake is set and when the vehicle is moving. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

WARNING

- **LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.**
- To avoid the risk of damage and injury and the potential violation of applicable laws, the navigation system is not for use with a "Video image" that is visible to the driver.
- In some countries or states the viewing of "Video image" on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.
- When applying the parking brake in order to view "Video image" or to enable other functions offered by the navigation system, park your vehicle in a safe place, and keep the brake pedal pushed down before releasing the parking brake if the vehicle is parked on a hill or otherwise might move when releasing the parking brake.

CAUTION

Accuracy/performance of interlock may be impacted by such factors as GPS signal detection and driving habits or conditions of the place where the vehicle is parked.

When you attempt to watch “Video image” while driving, the warning “**Viewing of front seat video source while driving is strictly prohibited.**” will appear on the screen. To watch “Video image” on this display, stop the vehicle in a safe place and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

When using a display connected to REAR MONITOR OUTPUT

The video output terminal (**REAR MONITOR OUTPUT**) is for connection of a display to enable passengers in the rear seats to watch video images.

WARNING

NEVER install the Rear Display in a location that enables the driver to watch video images while driving.

To avoid battery exhaustion

Be sure to run the vehicle engine while using this product. Using this product without running the engine can drain the battery.

WARNING

Do not use with vehicles that do not feature an ACC position.

Rear view camera

With an optional rear view camera, you are able to use the navigation system as an aid to keep an eye on trailers, or backing into a tight parking spot.

WARNING

- SCREEN IMAGE MAY APPEAR REVERSED.
- USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

CAUTION

- For safety reasons, the rear view camera function is not available until the navigation system boots up completely.
- The rear view mode is to use the navigation system as an aid to keep an eye on the trailers, or while backing up. Do not use this function for entertainment purposes. ■

Notes Before Using the System

Important (Serial Number:)

The serial number of this device is located on the bottom of this product. For your own security and convenience, be sure to record this number on the enclosed warranty card.

Failure to operate

Should the navigation system fail to operate properly, contact your dealer or nearest authorized Pioneer Service Station.

After-sales service for Pioneer products

Please contact the dealer or distributor from which you purchased the product for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below.
Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

- **U.S.A**
  Pioneer Electronics (USA) Inc.
  CUSTOMER SUPPORT DIVISION
  P.O. Box 1760 Long Beach, CA 90801-1760
  800-421-1404
- **CANADA**
  Pioneer Electronics of Canada, Inc.
  CUSTOMER SATISFACTION DEPARTMENT
  300 Allstate Parkway Markham, Ontario
  L3R 0P2
  1-877-283-5901
  905-479-4411

For warranty information, please see the Limited Warranty sheet included with your product.

Visit Our Web site

Visit us at the following site:

http://www.pioneerelectronics.com

In Canada

http://www.pioneerelectronics.ca

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner’s manuals, order product catalogs, research new products, and much more.
4. Receive notices of software upgrades and software updates. ▣

Manual overview

How to use this manual

Finding the operation procedure for what you want to do

When you have decided what you want to do, you can find the page you need from the “**Contents**”.

Finding the operation procedure from a menu name

If you want to check the meaning of an item displayed on the screen, you will find the necessary page from the “*Display information*” at the end of the manual.

Glossary

Use the glossary to find the meanings of terms.

Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

- Buttons on your navigation system are described in **ALL CAPITAL**, **BOLD** lettering:
  e.g.)
  MENU button, **MAP** button.
- Items in different menus, screen titles, and functional components are described in **bold** with double quotation marks “ ”:
  e.g.)
  “**Destination Menu**” screen or “**AV Source**” screen
- Touch panel keys that are available on the screen are described in **bold** in brackets [ ]:
  e.g.)
  [**Destination**], [**Settings**].
- Extra information, alternatives and other notes are presented in the following format:
  e.g.)
  ❒ If the home location has not been stored yet, set the location first.

- References are indicated like this:
  e.g.)
  ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

Definitions of terminology

“Front Display” and “Rear Display”

In this manual, the screen that is attached to the body of this navigation unit will be referred to as the “Front Display”. Any additional optional screen that is purchased for use in conjunction with this navigation unit will be referred to as the “Rear Display”.

“Video image”

“Video image” in this manual indicates moving images of DVD-Video, DivX®, iPod, and any equipment that is connected to this system with an RCA cable, such as general-purpose AV equipment.

“External storage device (USB, SD)”

The SD memory card, SDHC memory card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory only, it is referred to as the “USB storage device”.

“SD memory card”

The SD memory card and SDHC memory card are collectively referred to as the “SD memory card”. ■

Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author’s rights as protected by the Copyright Law. ■

Notice regarding DVD-Video viewing

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Rovi Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Rovi Corporation. Reverse engineering or disassembly is prohibited. ■

Notice regarding MP3 file usage

Supply of this navigation system conveys only a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating), real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com. ■

iPod compatibility

This product supports only the following iPod models and iPod software versions. Others may not work correctly.

- iPod nano first generation; Ver. 1.3.1
- iPod nano second generation; Ver. 1.1.3
- iPod nano third generation; Ver. 1.1.3
- iPod nano fourth generation; Ver. 1.0.3
- iPod fifth generation; Ver. 1.3
- iPod classic; Ver. 2.0.1
- iPod touch first generation; Ver. 2.2.1
- iPod touch second generation; Ver. 2.2.1
- iPhone; Ver. 2.2.1
- iPhone 3G; Ver. 2.2.1

- ❒ In this manual, iPod and iPhone will be referred to as iPod.
- ❒ When you use this navigation system with a Pioneer USB interface cable for iPod (CD-IU50V) (sold separately), you can control an iPod compatible with this navigation system.
- ❒ To obtain maximum performance, we recommend that you use the latest software for the iPod.
- ❒ Operation methods may vary depending on the iPod models and the software version of iPod.
- ❒ For more details about iPod compatibility with this navigation system, refer to the information on our website.
- ❒ iPod is a trademark of Apple Inc., registered in the U.S. and other countries.
- ❒ iPhone is a trademark of Apple Inc. ■

Map coverage

For more details about the map coverage of this navigation system, refer to the information on our website. ■

Protecting the LCD panel and screen

- ❒ Do not allow direct sunlight to fall on the LCD screen when this product is not being used. Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.
- ❒ When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of spots, colored stripes, etc.
- ❒ To protect the LCD screen from damage, be sure to touch the touch panel keys with your finger and gently touch the screen. ■

Notes on internal memory

Before removing the vehicle battery

If the battery is disconnected or discharged, the memory will be erased and must be reprogramed.

- ❒ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.
  - ➲ For more detailed information about the items which would be erased, refer to *Returning the navigation system to the default or factory settings* on page 178.

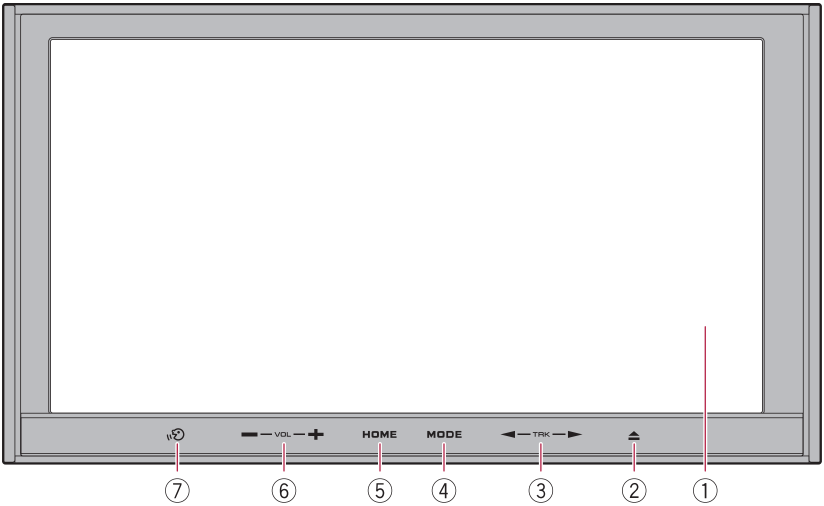
Data subject to erasure

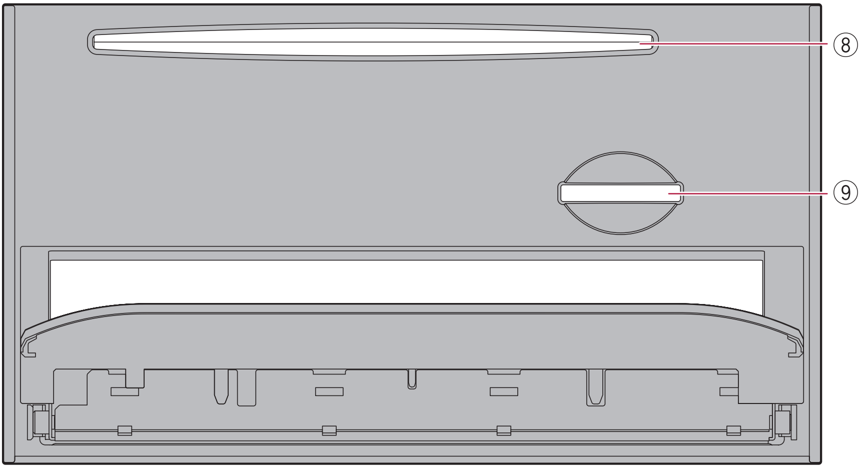
The information is erased by disconnecting the yellow lead from the battery (or removing the battery itself). However, some items remain.

- ❒ Some data remains. Read *Returning the navigation system to the default or factory settings* before you operate this function.
  - ➲ For more detailed information about the items which would be erased, refer to *Returning the navigation system to the default or factory settings* on page 178. ■

Checking part names and functions

This chapter gives information about the names of the parts and the main features using the buttons.





① **LCD screen**

② **OPEN CLOSE button**

③ **TRK (◄/►) button**
Press to perform manual seek tuning, fast forward, reverse and track search controls.

➲ For more details, refer to the descriptions from Chapter 14 to Chapter 30.

④ **MODE button**
- Press to switch between the map screen and the AV operation screen.
- Press to display the map screen while the navigation function screen is displayed.
- Press and hold to display the “**Picture Adjustment**” screen.
  ➲ For details, refer to *Operating the picture adjustment* on page 160.

⑤ **HOME button**
- Press the **HOME** button to display the “**Top Menu**”.
- Press to switch between the “Classic Menu” and the “Shortcut Menu” while the “**Top Menu**” is displayed.
- Press and hold to turn off the screen display.

⑥ **VOL (+/–) button**
Adjusts the AV (Audio and Video) source volume.

⑦ **VOICE button**
Press the **VOICE** button to activate voice operations.
Press and hold the **VOICE** button to switch the AV source to mute.

⑧ **Disc loading slot**
Insert a disc to play.
➲ For details concerning operations, refer to *Inserting and ejecting a disc* on this page.

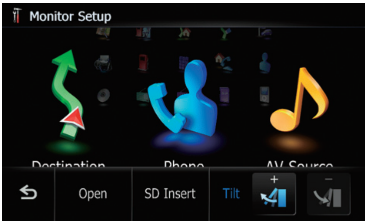
⑨ **SD card slot**
➲ For more detailed information, refer to *Inserting and ejecting an SD memory card* on the next page. ■

Adjusting the LCD panel angle

WARNING
When opening, closing and adjusting the angle of the LCD panel, be careful not to get your finger caught.

CAUTION
Do not open and close the LCD panel with hands by force. This may cause malfunction.

1 Press the OPEN CLOSE button.
The “**Monitor Setup**” screen appears.



2 Touch or to adjust the angle.

3 Touch ↩.
❒ The adjusted angle of the LCD panel will be memorized and the LCD panel will automatically return to that angle the next time the LCD panel is opened or closed. ■

Inserting and ejecting a disc

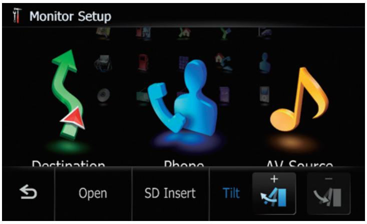
WARNING
- When opening, closing and adjusting the angle of the LCD panel, be careful not to get your finger caught.
- Do not use with the LCD panel left open. If LCD panel is left open, it may result in injury in the event of an accident.

CAUTION
- Do not open and close the LCD panel with hands by force. This may cause malfunction.

- Do not operate this navigation system until the LCD panel completely opens or closes. If this navigation system is operated while the LCD panel is opening or closing, the LCD panel may stop at that angle for safety.
- Do not place a glass or a can on this navigation system when the LCD panel is open. Doing so may break this navigation system.

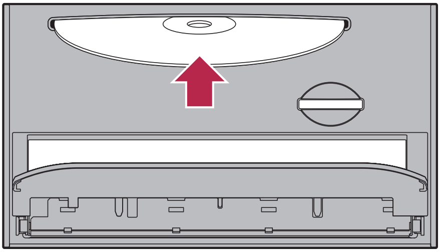
Inserting a disc

1 Press the OPEN CLOSE button.
The “**Monitor Setup**” screen appears.



2 Touch [Open].
The LCD panel opens, and the disc loading slot appears.

3 Insert a disc into the disc loading slot.



❐ Do not insert anything other than a disc into the disc loading slot.

4 Press the OPEN CLOSE button.
The LCD panel closes.

Ejecting a disc

1 Press the OPEN CLOSE button.
The “**Monitor Setup**” screen appears.

2 Touch [Disc Eject].
The LCD panel opens, and the disc is ejected.

3 Press the OPEN CLOSE button.
The LCD panel closes. ■

Inserting and ejecting an SD memory card

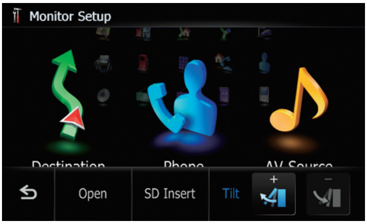
⚠ CAUTION

- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.
- Do not press the **OPEN CLOSE** button when the SD memory card is not fully inserted. Doing so may damage the card.
- Do not press the **OPEN CLOSE** button before the SD memory card has been completely removed. Doing so may damage the card. Press the middle of the SD memory card gently and pull out straight.

❐ This system is not compatible with Multi Media Card (MMC).
❐ Compatibility with all SD memory cards is not guaranteed.
❐ This unit may not achieve optimum performance with some SD memory cards.

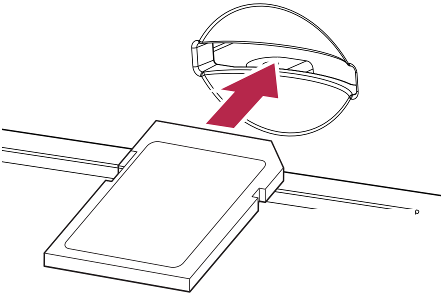
Inserting an SD memory card

1 Press the OPEN CLOSE button.
The “**Monitor Setup**” screen appears.



2 Touch [SD Insert].
The LCD panel opens, and the SD card slot appears.

3 Insert an SD memory card into the SD card slot.
Insert it with the label surface facing to the upside and press the card until it clicks and completely locks.

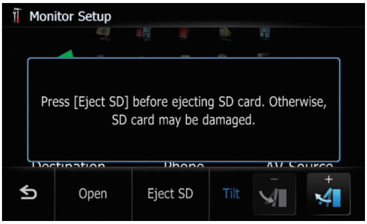


4 Press the OPEN CLOSE button.
The LCD panel closes, and then the navigation system restarts.

- ❐ If the SD memory card only contains music files or video files, the navigation system will not be restarted.

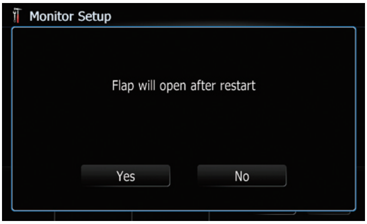
Ejecting an SD memory card

1 Press the OPEN CLOSE button.
The "**Monitor Setup**" screen appears.



Press [Eject SD] before ejecting SD card. Otherwise, SD card may be damaged.

2 Touch [Eject SD].
The following message appears.



Flap will open after restart

3 Touch [Yes].
The navigation system restarts, and then the LCD panel opens.

4 Press the SD memory card until it clicks.

5 Pull out the SD memory card.

6 Press the OPEN CLOSE button.
The LCD panel closes, and then the navigation system restarts. ■

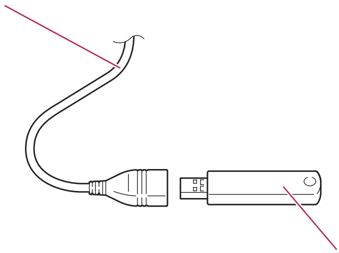
Plugging and unplugging a USB storage device

CAUTION

- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

Plugging in a USB storage device

- **Plug a USB storage device into the USB connector.**



❒ Compatibility with all USB storage device is not guaranteed.
This navigation system may not achieve optimum performance with some USB storage devices.

❒ Connection via USB hub is not possible.

Unplugging a USB storage device

- **Pull out the USB storage device after checking that no data is being accessed.** ■

Connecting and disconnecting an iPod

CAUTION

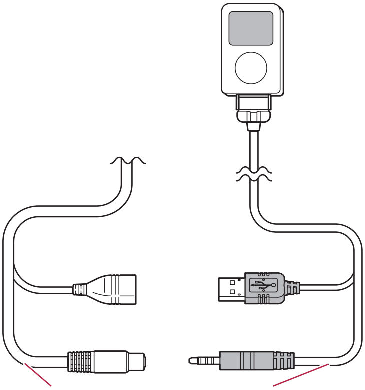
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

Connecting your iPod

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

❒ A USB interface cable for iPod (CD-IU50V) (sold separately) is required for connection.

1 Pull out the USB storage device after checking that no data is being accessed.



❒ For more details about iPod compatibility with this navigation system, refer to the information on our website.

❒ Connection via USB hub is not possible.

2 Connect your iPod.

Disconnecting your iPod

- **Pull out the USB interface cable for iPod after checking that no data is being accessed.** ■

Flow from startup to termination

1 Start the engine to boot up the system.

After a short pause, the splash screen comes on for a few seconds.

❒ To protect the LCD screen from damage, be sure to touch the touch panel keys with your finger and gently touch the screen.

2 Turn off the vehicle engine to terminate the system.

The navigation system is also turned off. ■

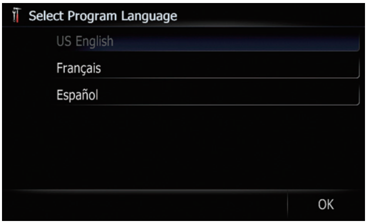
On first-time startup

When you use the navigation system for the first time, select the language that you want to use.

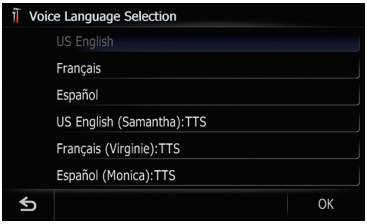
1 Start the engine to boot up the system.

After a short pause, the splash screen comes on for a few seconds.

2 Touch the language that you want to use on the screen.

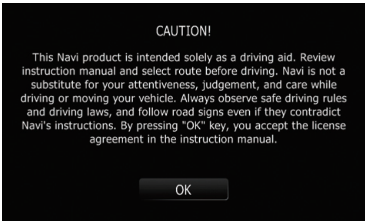

Select Program Language
US English
Français
Español
OK

3 Touch the language that you want to use for the voice guidance.


Voice Language Selection
US English
Français
Español
US English (Samantha):TTS
Français (Virginie):TTS
Español (Monica):TTS
OK

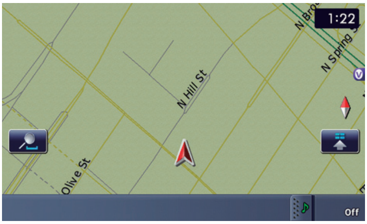
The navigation system will now restart.

4 Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.


CAUTION!

This Navi product is intended solely as a driving aid. Review instruction manual and select route before driving. Navi is not a substitute for your attentiveness, judgement, and care while driving or moving your vehicle. Always observe safe driving rules and driving laws, and follow road signs even if they contradict Navi's instructions. By pressing "OK" key, you accept the license agreement in the instruction manual.

OK


1:22
N Hill St
Olive St
N Spring S
Off

■

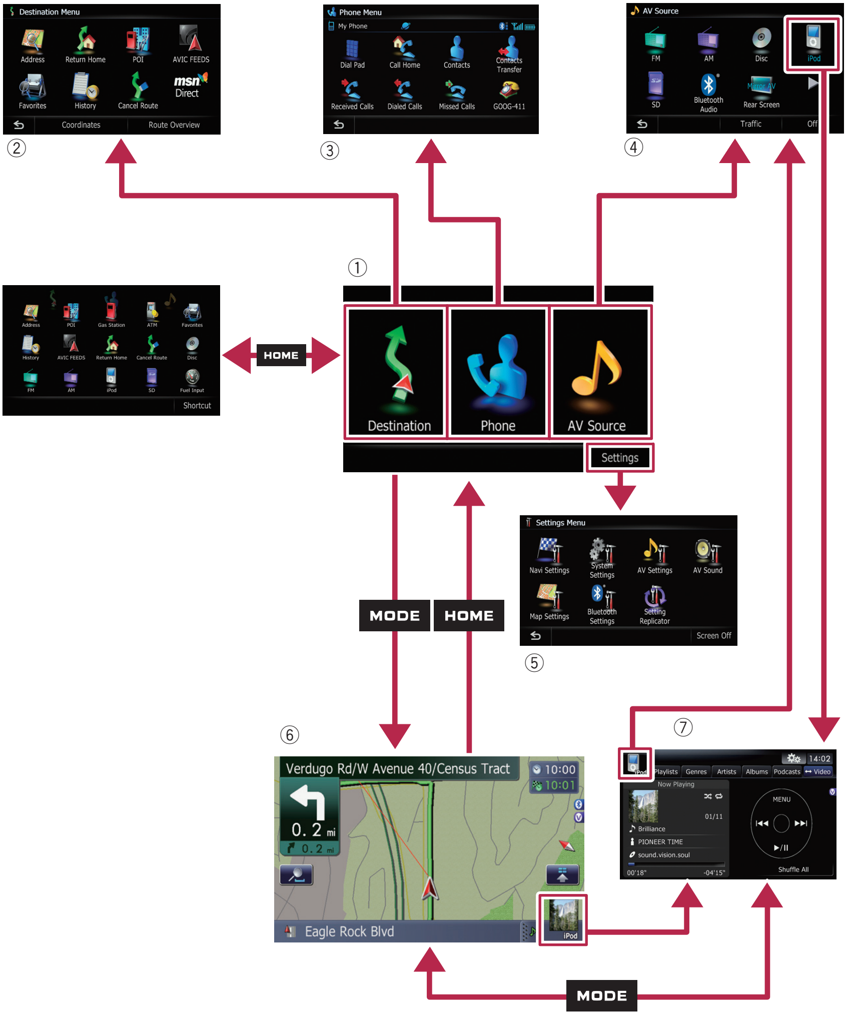
Regular startup

- **Start the engine to boot up the system.**

After a short pause, the splash screen comes on for a few seconds.

- ❒ The screen shown will differ depending on the previous conditions.
- ❒ When there is no route, the disclaimer appears after the navigation system reboots.
  Read the disclaimer carefully, checking its details, and then touch [**OK**] if you agree to the conditions.
- ❒ If the anti-theft function is activated, you must enter your password.
  Read the disclaimer carefully, checking its details, and then touch [**OK**] if you agree to the conditions. ■

Screen switching overview


Destination Menu
Address
Return Home
POI
AVIC FEEDS
Favorites
History
Cancel Route
msn Direct
Coordinates
Route Overview
②
Phone Menu
My Phone
Dial Pad
Call Home
Contacts
Contacts Transfer
Received Calls
Dialed Calls
Missed Calls
GOOG-411
③
AV Source
FM
AM
Disc
iPod
SD
Bluetooth Audio
Mirror AV
Rear Screen
Traffic
Off
④
①
Destination
Phone
AV Source
Settings
Address
POI
Gas Station
ATM
Favorites
History
AVIC FEEDS
Return Home
Cancel Route
Disc
FM
AM
iPod
SD
Fuel Input
Shortcut
HOME
Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound
Map Settings
Bluetooth Settings
Setting Replicator
Screen Off
⑤
MODE
HOME
⑥
Verdugo Rd/W Avenue 40/Census Tract
10:00
10:01
0. 2 mi
0. 2 mi
Eagle Rock Blvd
iPod
⑦
14:02
Playlists
Genres
Artists
Albums
Podcasts
Video
Now Playing
01/11
Brilliance
PIONEER TIME
sound.vision.soul
00'18"
-04'15"
MENU
Shuffle All
MODE

■

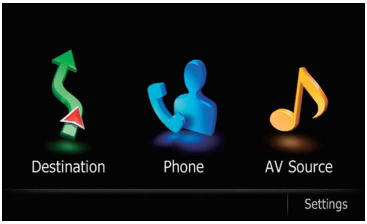
What you can do on each menu

① **Top Menu**

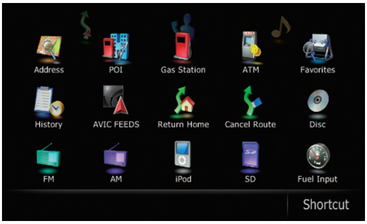
Press the **HOME** button to display the “**Top Menu**”.

This is the starting menu to access the desired screens and operate the various functions.

There are two types of the “**Top Menu**”.



Classic Menu



Shortcut Menu

❐ In this manual, “Classic Menu” will be referred to as “**Top Menu**”.

② **Destination Menu**

You can search for your destination on this menu. You can also check or cancel your set route from this menu.

③ **Phone Menu**

You can access the screen that is related to hands-free phoning to see call histories and change the settings on the Bluetooth wireless technology connection.

④ **AV Source menu**

You can access the screen for selecting the audio and visual source to play.

⑤ **Settings Menu**

You can access the screen to customize settings.

⑥ **Map screen**

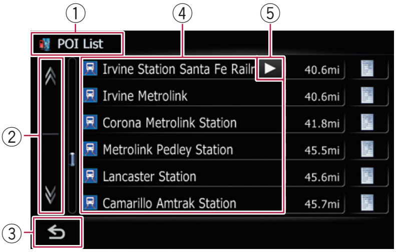
Press the **MODE** button to display the navigation map screen.

⑦ **AV operation screen**

This is the screen that normally appears when you play the AV source. Touching the icon on the top left corner displays the “**AV Source**” menu.

❐ To return to the previous screen, touch ↩. ■

Operating list screens (e.g. POI list)



Irvine Station Santa Fe Railr	40.6mi
Irvine Metrolink	40.6mi
Corona Metrolink Station	41.8mi
Metrolink Pedley Station	45.5mi
Lancaster Station	45.6mi
Camarillo Amtrak Station	45.7mi

① **Screen title**

② ▲ ▼

Touching ▲ or ▼ on the scroll bar scrolls through the list and allows you to view the remaining items.

③ ↩

Returns the previous screen.

④ **Listed items**

Touching an item on the list allows you to narrow down the options and proceed to the next operation.

⑤ ▶ ◀

If all of the characters cannot be displayed within the displayed area, touching the key to the right of the item allows you to see remaining characters. ■

Shortcut Menu

Registering your favorite menu items in shortcuts allows you to quickly jump to the registered menu screen by a simple touch on the “Shortcut Menu” screen.

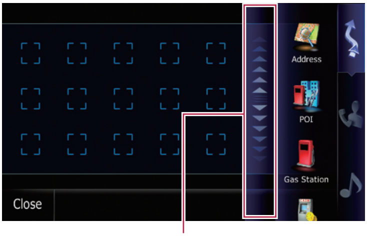
Selecting the Shortcut

❒ Up to 15 menu items can be registered in shortcuts.

1 Press the HOME button repeatedly to display the "Shortcut Menu" screen.

2 Touch [Shortcut].

The Short-Cut Selection screen appears.



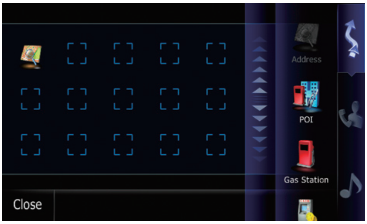
Scroll bar

3 Touch the tab on the right edge or scroll the bar to display the icon that you want to set to shortcut.

4 Touch and hold the icon that you want to add to shortcut.

5 Move the icon to the left side of the screen, and then release it.

The selected item is added to shortcut.



Canceling the Shortcut

1 Touch and hold the icon that you want to cancel the shortcut.

2 Move the icon to the right side of the screen, and then release it. ■

Displaying the rear view camera image

Rear view image is displayed on the left-hand side of the screen, while the map of your surroundings is indicated on the right.

➲ For details, refer to *Setting for rear view camera* on page 101.

1 Press the HOME button to display the "Top Menu".

2 Touch [Settings].

The "**Settings Menu**" screen appears.

3 Touch [System Settings].

The "**System Settings**" screen appears.

4 Touch [Back Camera].

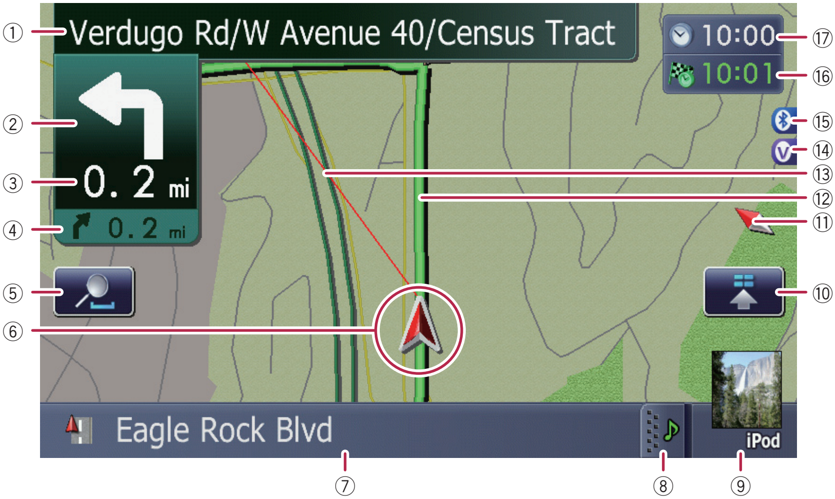
The "**Back Camera Settings**" screen appears.

5 Touch [Camera] to turn it [On]. ■

Most of the information provided by your navigation system can be seen on the map. You need to become familiar with how information appears on the map.

How to read the map screen

This example shows an example of a 2D map screen.



- ❒ Information with the mark (*) appears only when the route is set.
- ❒ Depending on the conditions and settings, some items may not be displayed.

① **Name of the street to be used (or next guidance point)***

② **Next direction of travel***
When you approach a guidance point, this item appears.
As you get closer to the guidance point, the color of the item changes to green.
- ❒ Touching this item enables you to hear the next guidance again.
- ❒ You can select between display and non-display.
  - ➲ For details, refer to *Displaying maneuvers* on page 45.

③ **Distance to the guidance point***
Shows the distance to the next guidance point.
- ❒ Touching this item enables you to hear the next guidance again.

④ **Second Maneuver Arrow***
Shows the turning direction after next and the distance to there.
- ➲ For details, refer to *Displaying maneuvers* on page 45.

⑤ **Zoom in/Zoom out**
Touching 🔍 displays touch panel keys for changing the map scale and the map orientation.

⑥ **Current position**
Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.
- ❒ The apex of the triangular mark is the proper current position.

⑦ **Street name (or city name) that your vehicle is traveling along**

➲ For details, refer to *Setting the current street name display* on page 45.

⑧ **Extension tab for the AV information bar**
Touching this tab opens the AV information bar and enables you to briefly view the current status on the AV source. Touching it again retracts the bar.

⑨ **Shortcut to the AV operation screen**
The **AV Source** currently selected is shown. Touching the indicator displays the AV operation screen of the current source directly.

❒ If you connect your iPod to this navigation system, the artwork for the album that is playing appears.

⑩ **Quick Access icon**
Displays **Quick Access** menu.

⑪ **Map orientation indicator**

- When “North up” is selected, **N** is displayed.
- When “Heading up” is selected, ▲ is displayed.
  ❒ The red arrow indicates north.

⑫ **Current route***
The route currently set is highlighted in bright color on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in another color.

⑬ **Direction line***
The direction towards your destination (next waypoint, or cursor) is indicated with a straight line.

⑭ **Voice icon**
This icon shows when the voice operation is active.

⑮ **Bluetooth connection icon**
This icon shows whether the device featuring Bluetooth technology is connected or not. You can select between display and non-display.

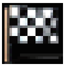
➲ For details, refer to **Bluetooth Connected** on page 45.

⑯ **Multi-Info window**
Each touch of [**Multi-Info window**] changes the display information.

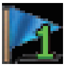
- **Distance to the destination (or distance to waypoint)***
- **Estimated time of arrival at your destination or waypoint***
  The estimated time of arrival is an ideal value calculated based on the value set for [**Speed**] and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.
- **Travel time to your destination or waypoint***

⑰ **Current time**

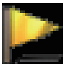
Meaning of guidance flags



Destination
The checkered flag indicates your destination.



Waypoint
The blue flags indicate your waypoints.

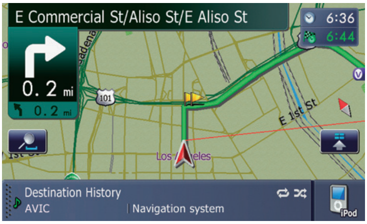


Guidance point
The next guidance point (next turning point, etc.) is shown by a yellow flag.

Displaying the AV information bar

You can check the current status on the selected AV source.

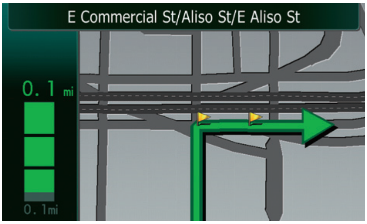
● **Touch ♪.**
AV information bar appears.



■ Touch the AV information bar.
The AV information bar is retracted.

Enlarged map of the intersection

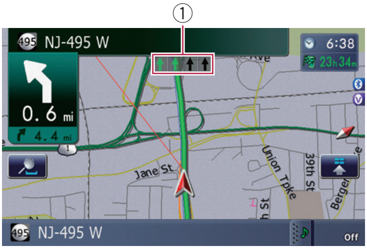
When “**Close Up View**” in the “**Map Settings**” screen is “**On**”, an enlarged map of the intersection appears.


E Commercial St/Aliso St/E Aliso St
0. 1 mi
0. 1mi

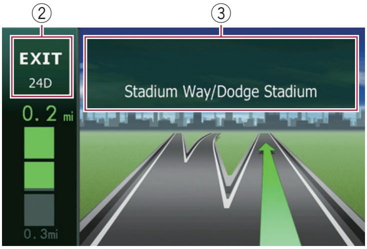
➲ For details, refer to *Setting “***Close Up View***”* on page 44.

Display during freeway driving

In certain locations of the freeway, lane information is available, indicating the recommended lane to be in to easily maneuver the next guidance.


①
NJ-495 W
6:38
23h34m
0. 6 mi
4. 4 mi
Jane St
Union Tpke
39th St
NJ-495 W
Off

While driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.


②
③
EXIT
24D
Stadium Way/Dodge Stadium
0. 2 mi
0. 3mi

① **Lane information**

② **Freeway exit information**
Displays the freeway exit.

③ **Freeway signs**
These show the road number and give directional information.

❒ If the data for these items is not contained in the built-in memory, the information is not available even if there are the signs on the actual road. ■

Operating the map screen

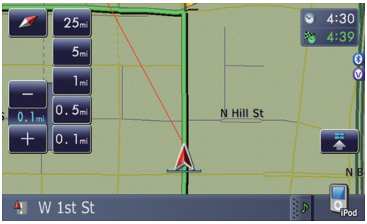
Changing the scale of the map

You can change the map scale between 25 yard and 1 000 miles (25 meters and 2 000 kilometers).

1 Display the map screen.

2 Touch 🔍 on the map screen.

+ and – with the map scale appear.


25mi
5mi
1mi
0. 5mi
0. 1mi
0. 1mi
4:30
4:39
N Hill St
W 1st St
iPod

3 Touch + or – to change the map scale.

❒ If you do not operate the function for a few seconds, the initial map screen automatically returns.

■ Touch the direct scale key to change the map to the selected scale directly.

Switching the map orientation

You can switch the vehicle’s direction on the map between “Heading up” and “North up”.

- Heading up:

  The map display always shows the vehicle's direction as proceeding toward the top of the screen.
- North up:
  The map display always has north at the top of the screen.

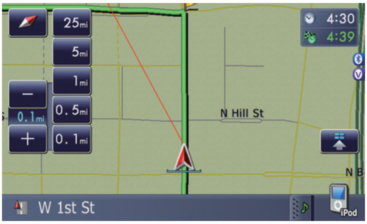
❒ The map orientation is fixed at "North up" in the following situation.
  — When the map scale is 25 miles (50 kilometers) or more.

❒ The map orientation is fixed at "Heading up" in the following situation.
  — When the 3D map screen is displayed.

1 Display the map screen.

2 Touch 🔍 on the map screen.

♦ or N appears.



3 Touch ♦ or N to switch the vehicle's direction.

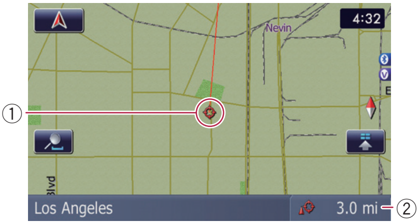
Each time you touch the key changes that setting.

❒ If you do not operate the function for a few seconds, the initial map screen automatically returns.

Scrolling the map to the position you want to see

1 Display the map screen.

2 Touch and drag the map in the desired direction to scroll.



① Cursor
② Distance from the current position

Positioning the cursor to the desired location results in a brief informational overview about the location being displayed at the bottom of screen, with street name and other information for this location being shown. (The information shown varies depending on the position.)

❒ The scrolling increment depends on your dragging length.

■ Touch ▲.

The map returns to the current position.

❒ Pressing **MODE** button returns the map to the current position.

Quick Access

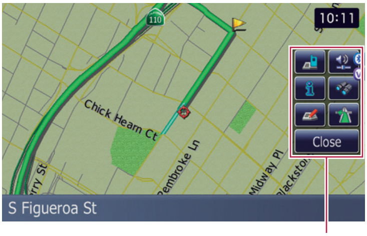
"**Quick Access**" allow you to perform various tasks, such as route calculation for the location indicated by the scroll cursor or registering a location in [**Favorites**], faster than using the navigation menu.

You can customize "**Quick Access**" displayed on screen. The "**Quick Access**" described here are prepared as the default setting.

➲ For details, refer to *Selecting "***Quick Access***"* on page 49.

❒ Items marked with an asterisk (*) cannot be removed from **Quick Access** menu.

- **When the map is displayed, touch .**



Quick Access menu

: **Route Options***
Displayed when the map is not scrolled. This item can be selected only during route guidance.
You can modify the conditions for route calculation and recalculate the current route.

➲ For details, refer to *Modifying the route calculation conditions* on page 55.

: **Destination***
Displayed when the map is scrolled. Set the route to the place specified with the scroll cursor.

: **Registration**
Register information on the location indicated by the scroll cursor to "**Favorites**".

➲ For details, refer to *Registering a location by scroll mode* on page 64.

: **Vicinity Search**
Find POIs (Points Of Interest) in the vicinity of the scroll cursor.

➲ For details, refer to *Searching for a nearby POI* on page 60.

: **Overlay POI**
Displays icons for surrounding facilities (POI) on the map.

➲ For details, refer to *Displaying POI on the map* on page 46.

: **Volume**
Displays the "**Volume Settings**" screen.

➲ For more details about "**Volume**", refer to *Setting the Volume for Guidance and Phone* on page 100.

: **Contacts**
Displays the "**Contacts List**" screen.

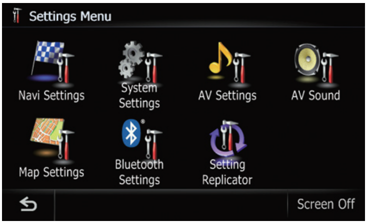
➲ For details, refer to *Calling a number in the "**Contacts List**"* on page 85.

[**Close**]
Hides the **Quick Access** menu. ■

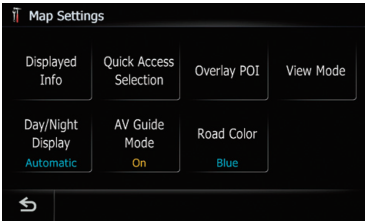
The general settings related with a map screen can be customized.
To customize the map screen, display the "**Map Settings**" screen.

1 Display the "Top Menu" screen.

2 Touch [Settings].
The "**Settings Menu**" screen appears.


Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound
Map Settings
Bluetooth Settings
Setting Replicator
Screen Off

3 Touch [Map Settings].
The "**Map Settings**" screen appears.

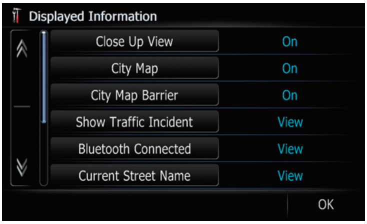

Map Settings
Displayed Info
Quick Access Selection
Overlay POI
View Mode
Road Color

Day/Night Display Automatic
AV Guide Mode On
Road Color Blue

Setting the Item on the Map Screen

1 Display the "Map Settings" screen.

2 Touch [Displayed Info].
The "**Displayed Information**" screen appears.


Displayed Information
OK

Close Up View On
City Map On
City Map Barrier On
Show Traffic Incident View
Bluetooth Connected View
Current Street Name View

Setting "Close Up View"

This setting enables switching to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of freeway or a junction.

- **Touch [Close Up View].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Switches to an enlarged map.
  Displays the close up view with the 2D map.
- [**Off**]:
  Does not switch to an enlarged map.

City Map

You can select whether to display the city map when in certain metropolitan city areas.

❒ The city map is displayed when the map scale is 0.05 mile (50 meters) or less.

- **Touch [City Map].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Automatically switches to the city map when in a city map area.
- [**Off**]:
  Does not show the city map.
  ❒ Even if you switch [**City Map**] to [**On**], city map cannot display in areas where there is no city map data.

Setting the switching of the city map display

Sets whether to switch to the city map display when the vehicle is within a city map area.

- **Touch [City Map Barrier].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Displays a city map when the vehicle enters the area of the city map.
- [**Off**]:

Displays a city map when the area displayed on the map falls entirely within the city map area.

Show Traffic Incident

Selects whether to display or hide the traffic notification icons on the map when incidents occur on your route.

● **Touch [Show Traffic Incident].**

Each time you touch the key changes that setting.

- [**View**] (default):
  Displays the icons on the map.
- [**Hide**]:
  Hides the icons on the map.

➲ For details, refer to *Checking traffic information manually* on page 74.

Bluetooth Connected

Selects whether to display or hide the icon for current status of the phone connection via Bluetooth wireless technology.

● **Touch [Bluetooth Connected].**

Each time you touch the key changes that setting.

- [**View**] (default):
  Displays the Bluetooth connection icon on the map.
- [**Hide**]:
  Hides the Bluetooth connection icon on the map.

➲ For details about the Bluetooth connection icon, refer to ***Bluetooth connection icon*** on page 40.

Setting the current street name display

Selects whether to display or hide the street name (or city name) that your vehicle is traveling along.

● **Touch [Current Street Name].**

Each time you touch the key changes that setting.

- [**View**] (default):
  Displays the street name (or city name) on the map.
- [**Hide**]:
  Hides the street name (or city name) on the map.

Setting the Favorites icon display

You can select whether to display the “**Favorites**” icon on the map.

❒ **Favorites** icons are displayed when the map scale is 10 mile (20 kilometers) or less.

● **Touch [Favorites Icon].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Displays the “**Favorites**” icon on the map.
- [**Off**]:
  Hides the “**Favorites**” icon on the map.

3D Land Mark

You can select whether to display the 3D Landmark on the map.

❒ 3D Landmark only appears when the view mode is [**3D View**] and the map scale is set to 0.25 mile (200 m) or lower.

● **Touch [3D Land Mark].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Displays the 3D Landmark on the map.
- [**Off**]:
  Hides the 3D Landmark on the map.

Displaying maneuvers

Selects whether to display or hide the next turn ahead of the vehicle on the map.

- **Touch [Show Manuever].**

Each time you touch the key changes that setting.

- [**View**] (default):
  Displays the next turn ahead of the vehicle on the map.
- [**Hide**]:
  Hides the next turn ahead of the vehicle on the map.

MSN Direct

Selects whether to display or hide the received MSN Direct information on the map.

❐ Following informations are displayed:
  — **Gas Prices**
  — **Movie Times**
  — **Local Events**

❐ **MSN Direct** icons are not displayed when the map scale is 0.75 mile (1 kilometers) or more.

- **Touch [MSN Direct].**

Each time you touch the key changes that setting.

- [**On**] (default):
  Displays the icons on the map.
- [**Off**]:
  Hides the icons on the map. ■

Displaying POI on the map

Displays icons for the surrounding facilities (POI) on the map.

❐ POI icons are not displayed when the map scale is 0.75 mile (1 kilometers) or more.

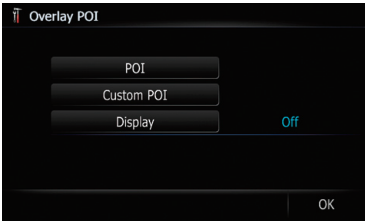
Displaying preinstalled POIs on the map

❐ You can select up to 10 items from the detailed category.

1 Display the “Map Settings” screen.

2 Touch [Overlay POI].

The “**Overlay POI**” screen appears.

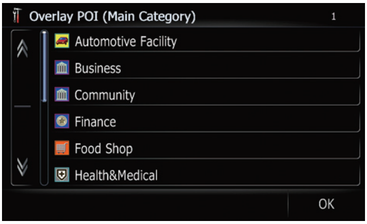

Overlay POI
POI
Custom POI
Display
Off
OK

3 Touch [Display] to turn it [On].

❐ If you do not want to display the POI icon on the map, touch [**Display**] to turn it [**Off**]. (Even if [**Display**] is turned [**Off**], the POI selection setting is retained.)

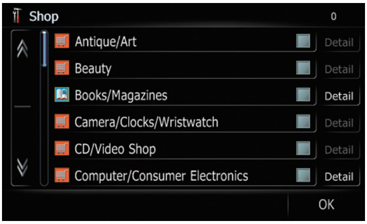
4 Touch [POI].

The “**Overlay POI (Main Category)**” screen appears.


Overlay POI (Main Category)
1
Automotive Facility
Business
Community
Finance
Food Shop
Health&Medical
OK

5 Touch the category you want to display.

A list of subcategories under the selected main category appears.


Shop
0
Antique/Art
Beauty
Books/Magazines
Camera/Clocks/Wristwatch
CD/Video Shop
Computer/Consumer Electronics
Detail
Detail
Detail
Detail
Detail
Detail
OK

- Touch [**OK**].

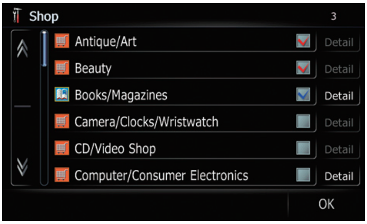
The previous screen returns.

6 Touch the subcategory.

A red check mark appears next to the selected category. To cancel the selection, touch the entry again.

- If you want to search with more detailed categories, touch [**Detail**].

Touch the item and touch [**OK**]. When only a few types of the detailed categories are selected, blue check marks will appear.


Shop
3
Antique/Art ☑ Detail
Beauty ☑ Detail
Books/Magazines ☑ Detail
Camera/Clocks/Wristwatch ☐ Detail
CD/Video Shop ☐ Detail
Computer/Consumer Electronics ☐ Detail
OK

❐ When subcategory is selected, [**Detail**] is not available.

7 Touch [OK].

The previous screen returns.

8 To finish the selection, touch [OK].

Displaying the customized POIs

Creating a customized POI is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our website.) Storing the customized POI properly and inserting the SD memory card enables the system to display the icons on the map screen.

❐ You can select up to 10 items from the detailed category.

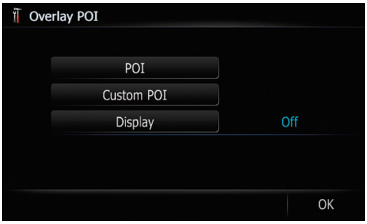
1 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the “Map Settings” screen.

3 Touch [Overlay POI].

The “**Overlay POI**” screen appears.

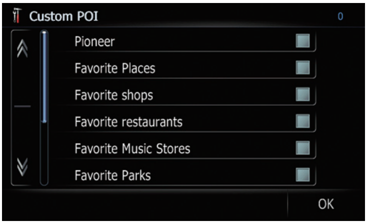

Overlay POI
POI
Custom POI
Display
Off
OK

4 Touch [Display] to turn it [On].

❐ If you do not want to display the POI icon on the map, touch [**Display**] to turn it [**Off**]. (Even if [**Display**] is turned [**Off**], the POI selection setting is retained.)

5 Touch [Custom POI].

The list of POI categories appears.


Custom POI
0
Pioneer ☐
Favorite Places ☐
Favorite shops ☐
Favorite restaurants ☐
Favorite Music Stores ☐
Favorite Parks ☐
OK

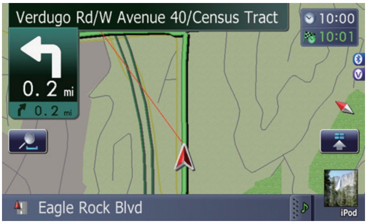
6 Touch the category you want to display.

7 To finish the selection, touch [OK]. ◼

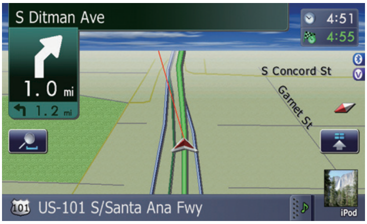
Switching the view mode

Various types of screen displays can be selected for navigation guidance.

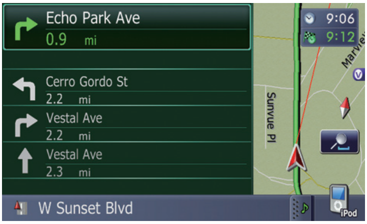
2D map screen


Verdugo Rd/W Avenue 40/Census Tract
10:00
10:01
0. 2 mi
0. 2 mi
Eagle Rock Blvd
iPod

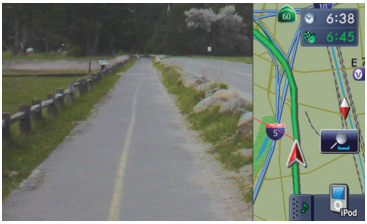
3D map screen


S Ditman Ave
4:51
4:55
1.0 mi
1.2 mi
S Concord St
Garnet St
101 US-101 S/Santa Ana Fwy
iPod

Street View


Echo Park Ave
0.9 mi
Cerro Gordo St
2.2 mi
Vestal Ave
2.2 mi
Vestal Ave
2.3 mi
Sunvue Pl
9:06
9:12
W Sunset Blvd
iPod

Rear View


60
6:38
6:45
iPod

1 Display the "Map Settings" screen.

2 Touch [View Mode].

The "**View Mode**" screen appears.

3 Touch the type that you want to set.

You can select the following types:

- [**2D View**] (default):
  Displays the 2D map screen.
- [**3D View**]:
  Displays the 3D map screen.
- [**Street View**]:
  Displays the "**Street View**" screen.
  ❐ This mode is available when the route is set.
- [**Rear View**]:
  Displays the rear view images.
  ❐ This mode is available when [**Camera**] is set to "**On**".
  ➲ For details, refer to *Setting for rear view camera* on page 101. ■

Setting the map color change between day and night

To improve the visibility of the map during the evening, you can set the timing for changing the combination of the map color.

1 Display the "Map Settings" screen.

2 Touch [Day/Night Display].

Each time you touch the key changes that setting.

- [**Automatic**] (default):
  You can change the colors of a map between daytime and nighttime according to whether the vehicle lights are On or Off.
- [**Day**]:
  The map is always displayed with daytime colors.

❐ To use this function with [**Automatic**], the Orange/white lead of the navigation system must be connected correctly. ■

Changing the road color

You can set the road color to bluish or reddish.

1 Display the "Map Settings" screen.

2 Touch [Road Color].

Each time you touch the key changes that setting.

- [**Blue**] (default):
  Changes to blue based road colors.
- [**Red**]:
  Changes to red based road colors. ■

Changing the setting of navigation interruption screen

Set whether to automatically switch to the navigation screen from the AV operation screen when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

1 Display the “Map Settings” screen.

2 Touch [AV Guide Mode].

Each time you touch the key changes that setting.

- [**On**] (default):
  Switches from the audio operation screen to the navigation screen.
- [**Off**]:
  Does not switch the screen. ■

Selecting “Quick Access”

Select items to display on the map screen. In the list displayed on screen, the items with red checks are displayed on the map screen. Touch the item you want to display and then touch [**OK**] when a red check appears. You can select up to five items.

1 Display the “Map Settings” screen.

2 Touch [Quick Access Selection].

The “**Quick Access Selection**” screen appears.

3 Touch the item that you want to set in “Quick Access”.

You can select the following items:

❒ Settings marked with an asterisk (*) show that these are default or factory settings.

- : **Registration***
  Register information on the location indicated by the scroll cursor to “**Favorites**”.
  ➲ For details, refer to *Registering a location by scroll mode* on page 64.
- : **Vicinity Search***
  Find POIs (Points Of Interest) in the vicinity of the scroll cursor.
  ➲ For details, refer to *Searching for a nearby POI* on page 60.
- : **Overlay POI***
  Displays icon for surrounding facilities (POI) on the map.
  ➲ For details, refer to *Displaying POI on the map* on page 46.
- : **Volume***
  Displays the “**Volume Settings**” screen.
  ➲ For more details about “**Volume**”, refer to *Setting the Volume for Guidance and Phone* on page 100.
- : **Contacts***
  Displays the “**Contacts List**” screen.
  ➲ For details, refer to *Calling a number in the “***Contacts List***”* on page 85.
- : **Whole Route Overview**
  Displays the entire route (currently set).
  ➲ For details, refer to Chapter 7.
- : **Stock Info**
  Displays stock prices.
  ➲ For details, refer to *Browsing stock quotes* on page 78.
- : **Traffic On Route**
  Displays a list of traffic information on the route.
  ➲ For details, refer to *Checking traffic information on the route* on page 73.
- : **Traffic Events**
  Displays a list of traffic events information.
  ➲ For details, refer to *Viewing the traffic event* on page 72.
- : **Day/Night Display**
  Switches **Day/Night Display** setting.
  ➲ For details, refer to *Setting the map color change between day and night* on the previous page.
- : **Favorites Icon**
  Switches **Favorites Icon** setting.
  ➲ For details, refer to *Setting the* **Favorites** *icon display* on page 45.

4 To finish the setting, touch [OK]. ■

⚠ CAUTION

For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

❒ Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

The basic flow of creating your route

1 Park your vehicle in a safe place and apply the parking brake.

2 Display the “Top Menu” screen.

3 Select the method of searching for your destination.

➲ For details, refer to Chapter 8.

4 Enter the information about your destination to calculate route.

5 Confirm the location on the map.

➲ For details, refer to *Checking the location on the map* on this page.

6 The navigation system calculates the route to your destination, and then shows the route on the map.

7 Check and decide the route.

➲ For details, refer to *Checking the calculated route* on this page.

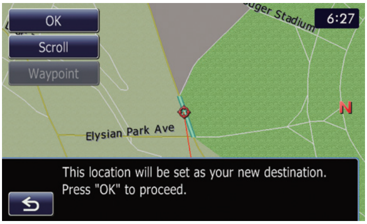
8 Your navigation system sets the route to your destination, and the map of your surroundings appears.

9 After releasing the parking brake, drive in accordance with navigation guidance. ■

Checking the location on the map

After searching for the destination, the “Location confirmation screen” appears.

Location confirmation screen



This location will be set as your new destination.
Press "OK" to proceed.

● **Touch [OK].**

The destination is set, and then route calculation starts.

❒ If you press the **MODE** button during route calculation, the calculation is canceled and the map screen appears.

■ Touch [**Scroll**].

The map display changes to the scroll mode. You can fine-tune the location in the scroll mode, and then you can set the location as your destination or do various operations.

■ Touch [**Waypoint**].

The location is added to the “**Waypoints List**” screen.

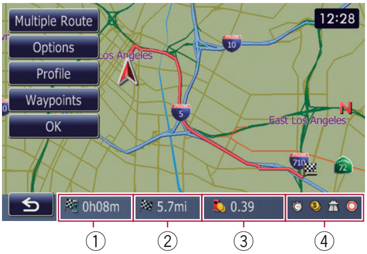
❒ If a destination is not set, [**Waypoint**] is not available. ■

Checking the calculated route

After the destination is set, route calculation starts.

When the route calculation is completed, “Route confirmation screen” appears.

Route confirmation screen



① Travel time to your destination
② Distance to the destination
③ Estimated fuel cost to your destination
 ➲ For details, refer to *Inputting the fuel consumption information for calculating the fuel cost* on page 96.
④ Route calculation condition

● **Touch [OK].**
Sets the displayed route as your route, and starts the route guidance.

- Touch ↩.

The message confirming whether to cancel the calculated route appears.
Touch [**Yes**] to cancel the calculated route, and then the map screen appears.

Display multiple routes

You can select a desired route from multiple route options. Calculated routes are shown in different colors.

❒ If you set waypoints, you cannot use the multiple route option.

1 Touch [Multiple Route].
The “Multiple Route Option” screen appears.

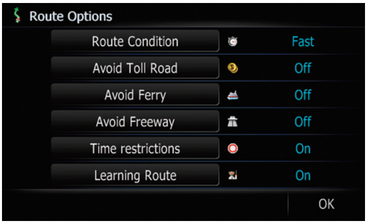
2 Touch 🟥 1 to 🟪 6.
Another route is displayed.

3 Touch [OK].
“Route confirmation screen” appears.

Modifying the route calculation conditions

You can modify the conditions for route calculation and recalculate the current route.

1 Touch [Options] on the “Route confirmation screen”.
The “**Route Options**” screen appears.


Route Options

Route Condition	Fast
Avoid Toll Road	Off
Avoid Ferry	Off
Avoid Freeway	Off
Time restrictions	On
Learning Route	On

2 Touch the desired items to change the route calculation conditions and then touch [OK].
The route is recalculated, and “Route confirmation screen” appears.

Items that users can operate

Settings marked with an asterisk (*) show that these are default or factory settings.

Route Condition
This setting controls how the route should be calculated by taking into account the time or the distance or the main road.
Determines which condition takes priority for route calculation.
[Fast]*:
Calculates a route with the shortest travel time to your destination as a priority.
[Short]:
Calculates a route with the shortest distance to your destination as a priority.
[Main Road]:
Calculate a route that passes major arterial road as a priority.

Avoid Toll Road

This setting controls whether toll roads (including toll areas) should be taken into account.

[Off]*:
Calculate a route that may include toll roads (including toll areas).

[On]:
Calculate a route that avoids toll roads (including toll areas).

❐ The system may calculate a route that includes toll road even if [**On**] is selected.

Avoid Ferry

This setting controls whether ferry crossings should be taken into account.

[Off]*:
Calculate a route that may include ferries.

[On]:
Calculate a route that avoids ferries.

❐ The system may calculate a route that includes ferry way even if [**On**] is selected.

Avoid Freeway

This setting controls whether freeways may be included in the route calculation.

[Off]*:
Calculate a route that may include freeways.

[On]:
Calculate a route that avoids freeways.

❐ The system may calculate a route that includes freeway even if [**On**] is selected.

Time restrictions

This setting controls whether streets or bridges have traffic restrictions during a certain time should be taken into account.

❐ If you want to set your route to avoid opened bridges, select [**On**].

[On]*:
Calculate a route while avoiding streets or bridges with traffic restrictions during a certain time.

[Off]:
Calculate a route while ignoring traffic restrictions.

❐ The system may calculate a route that includes streets or bridges that are subject to traffic restrictions during a certain time even if [**On**] is selected.

⚠ CAUTION

If the time difference is not set correctly, the navigation system cannot consider traffic regulations correctly. Set the time difference correctly (➲ Refer to *Setting the time difference* on page 99).

Learning Route

The system learns the travel history of your vehicle for each road.

This setting controls whether or not the travel history should be taken into account.

[On]*:
Calculate the route with the travel history taken into account.

[Off]:
Calculate the route without the travel history taken into account.

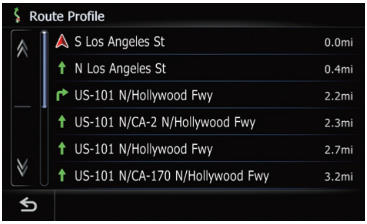
[Clear]:
Clear the current travel history.

Checking the current itinerary

You can check the route details.

- **Touch [Profile] on the "Route confirmation screen".**

The "**Route Profile**" screen appears.



Route Profile

S Los Angeles St	0.0mi
N Los Angeles St	0.4mi
US-101 N/Hollywood Fwy	2.2mi
US-101 N/CA-2 N/Hollywood Fwy	2.3mi
US-101 N/Hollywood Fwy	2.7mi
US-101 N/CA-170 N/Hollywood Fwy	3.2mi

Adding a waypoint

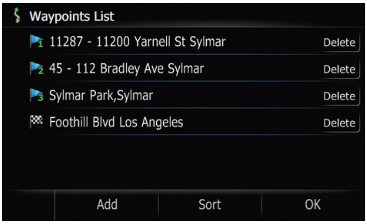
Up to 5 waypoints can be set, and waypoints and final destination can be sorted automatically or manually.

❒ When you set waypoints in the route to your destination, the route up to the next waypoint will appear in light green. The rest of the route will appear in light blue.

➲ For details concerning operations, refer to *Adding a waypoint* on the next page.

1 Touch [Waypoints] on the "Route confirmation screen".

The "**Waypoints List**" screen appears.

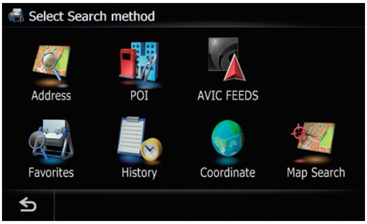


Waypoints List

11287 - 11200 Yarnell St Sylmar	Delete
45 - 112 Bradley Ave Sylmar	Delete
Sylmar Park,Sylmar	Delete
Foothill Blvd Los Angeles	Delete

2 Touch [Add].

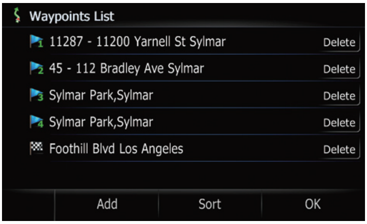
The "**Select Search method**" screen appears.



3 Search for a location.

➲ For details about the search methods, refer to Chapter 8.

After searching for a point, display it on a map, then touch [**OK**] to add to the "**Waypoints List**" screen.



Waypoints List

11287 - 11200 Yarnell St Sylmar	Delete
45 - 112 Bradley Ave Sylmar	Delete
Sylmar Park,Sylmar	Delete
Sylmar Park,Sylmar	Delete
Foothill Blvd Los Angeles	Delete

4 Touch [OK] on the "Waypoints List" screen.

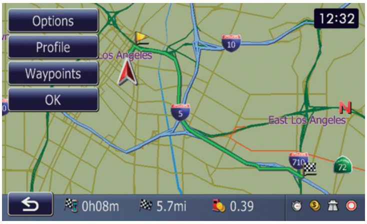
The route is recalculated, and "Route confirmation screen" appears. ■

You can check the route details. You can also recalculate the route in different conditions.

1 Display the “Top Menu” screen.

2 Touch [Destination].
The “**Destination Menu**” screen appears.

3 Touch [Route Overview].
The “**Route Overview**” screen appears.


Options
Profile
Waypoints
OK
12:32
Los Angeles
East Los Angeles
0h08m
5.7mi
0.39

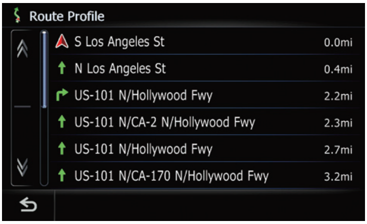
❒ [**Route Overview**] is active only when the route is set.

Checking the current itinerary

You can check the route details.

1 Display the “Route Overview” screen.

2 Touch [Profile].
The “**Route Profile**” screen appears.


Route Profile

S Los Angeles St	0.0mi
N Los Angeles St	0.4mi
US-101 N/Hollywood Fwy	2.2mi
US-101 N/CA-2 N/Hollywood Fwy	2.3mi
US-101 N/Hollywood Fwy	2.7mi
US-101 N/CA-170 N/Hollywood Fwy	3.2mi

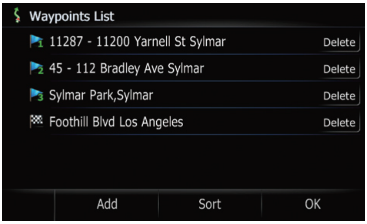
❒ When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.) ▣

Editing waypoints

You can edit waypoints (locations you want to visit on the way to your destination) and recalculate the route so that is passes through these locations.
To edit the waypoints, display the “**Waypoints List**” screen.

1 Display the “Route Overview” screen.

2 Touch [Waypoints].
The “**Waypoints List**” screen appears.


Waypoints List

1 11287 - 11200 Yarnell St Sylmar
2 45 - 112 Bradley Ave Sylmar
3 Sylmar Park,Sylmar
Foothill Blvd Los Angeles

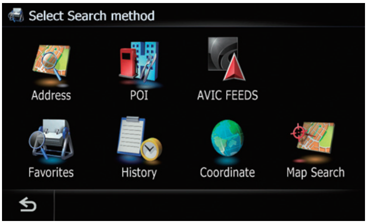
Delete
Delete
Delete
Delete
Add
Sort
OK

Adding a waypoint

Up to 5 waypoints can be set, and waypoints and final destination can be sorted automatically or manually.

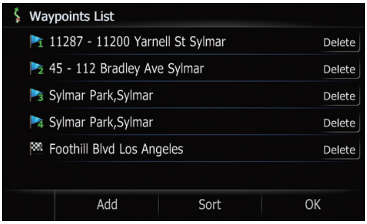
1 Display the “Waypoints List” screen.

2 Touch [Add].
The “**Select Search method**” screen appears.


Select Search method
Address
POI
AVIC FEEDS
Favorites
History
Coordinate
Map Search

3 Search for a location.
➲ For details about the search methods, refer to Chapter 8.

After searching for a point, display it on a map, then touch [**OK**] to add to the “**Waypoints List**” screen.


Waypoints List
11287 - 11200 Yarnell St Sylmar
Delete
45 - 112 Bradley Ave Sylmar
Delete
Sylmar Park,Sylmar
Delete
Sylmar Park,Sylmar
Delete
Foothill Blvd Los Angeles
Delete
Add
Sort
OK

4 Touch [OK] on the "Waypoints List" screen.

The route is recalculated, and "Route confirmation screen" appears.

5 Touch [OK].

The map of the current position appears.

Deleting a waypoint

You can delete waypoints from the route and then recalculate the route. (You can delete waypoints successively.)

1 Display the "Waypoints List" screen.

2 Touch [Delete] next to the waypoint that you want to delete.

The touched waypoint will be deleted from the list.

3 Touch [OK] on the "Waypoints List" screen.

The route is recalculated, and "Route confirmation screen" appears.

4 Touch [OK].

The map of the current position appears.

Sorting waypoints

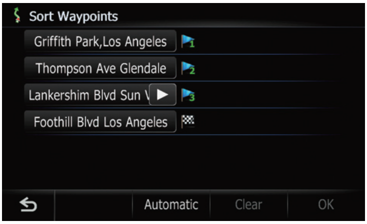
You can sort waypoints and recalculate the route.

❒ You cannot sort waypoints that you have already passed.

1 Display the "Waypoints List" screen.

2 Touch [Sort].

The "**Sort Waypoints**" screen appears.


Sort Waypoints
Griffith Park,Los Angeles
Thompson Ave Glendale
Lankershim Blvd Sun V
Foothill Blvd Los Angeles
Automatic
Clear
OK

3 Touch the waypoint or destination.

Put them in the desired order.

▪ Touch [**Automatic**].

You can sort the destination and waypoints automatically. The system will show the nearest waypoint (distance in a straight line) from the current location as waypoint 1, and sort the other points (including your destination) in order of distance from the waypoint 1.

▪ Touch [**Clear**].

The sorting waypoints is canceled.

4 Touch [OK].

The "**Waypoints List**" screen appears.

5 Touch [OK] on the "Waypoints List" screen.

The route is recalculated, and "Route confirmation screen" appears.

6 Touch [OK].

The map of the current position appears. ▣

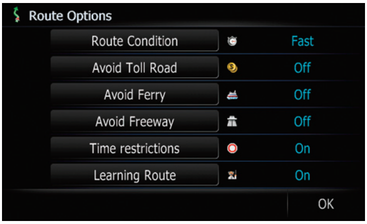
Modifying the route calculation conditions

The settings related to route calculation can be customized.

1 Display the "Route confirmation screen".

2 Touch [Options].

The "**Route Options**" screen appears.


Route Options
OK

Route Condition	Fast
Avoid Toll Road	Off
Avoid Ferry	Off
Avoid Freeway	Off
Time restrictions	On
Learning Route	On

➲ For details concerning operations, refer to *Modifying the route calculation conditions* on page 51. ■

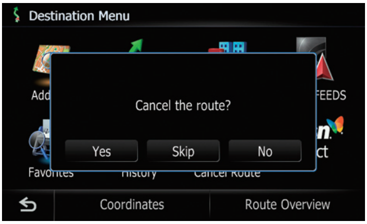
Canceling the route guidance

If you no longer need to travel to your destination, follow the steps below to cancel the route guidance.

1 Display the “Destination Menu” screen.

2 Touch [Cancel Route].

A message confirming the cancellation of the current route appears.


Destination Menu
Add
FEEDS
Yes
Skip
No
ct
Favorites
History
Cancel Route
Coordinates
Route Overview

Cancel the route?

3 Touch [Yes].

The current route is deleted, and a map of your surroundings reappears.

- Touch [**Skip**].

The next waypoint along the route can be skipped.

A new route to your destination through all remaining waypoints, except for the skipped waypoint, is calculated.

When the route calculation is completed, “Route confirmation screen” appears.

❒ [**Skip**] is available only when a waypoint is set.

- Touch [**No**].

The previous screen returns without deleting the route. ■

CAUTION

For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

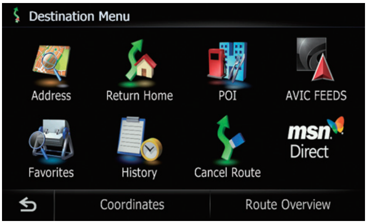
❐ Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

To search for a location, display the "**Destination Menu**" screen.

1 Press the HOME button to display the "Top Menu".

2 Touch [Destination].

The "**Destination Menu**" screen appears.



Searching for a location by address

The most frequently used function is [**Address**], in which the address is specified and the destination is searched.

You can select the method of searching for a location by address.

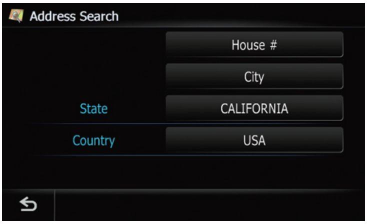
- Searching for a city name first
- Finding the location by specifying the house number

To search for a location, display the "**Address Search**" screen.

1 Display the "Destination Menu" screen.

2 Touch [Address].

The "**Address Search**" screen appears.



3 Touch the key next to "Country" to select the country.

If the destination is in another country, this changes the country setting.

❐ Once the country has been selected, you only have to change countries when your destination is outside of the country you selected.

4 Touch the key next to "State" and touch the desired state, province, or territory on the list.

If the location that you want to search for is in another state, province, or territory, this changes the area setting.

❐ Once the state, province, or territory has been selected, you only have to change states, provinces, or territories when your destination is outside of the state, province, or territory you selected.

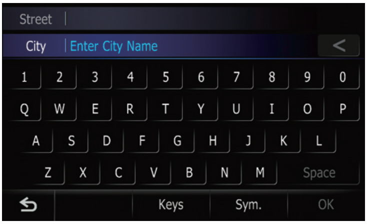
Searching for a city name first

❐ Depending on the search results, some steps may be skipped.

1 Display the "Address Search" screen.

2 Touch [City].

The "**Enter City Name**" screen appears.

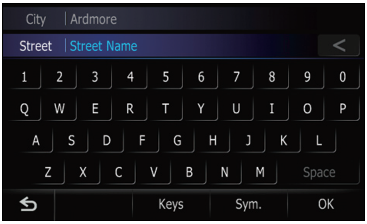

Street |
City | Enter City Name
<
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
Keys
Sym.
OK

3 Enter the city name and then touch [OK].

The "**Select City**" screen appears.

4 Touch the desired city name.

The "**Street Name**" screen appears.


City | Ardmore
Street | Street Name
<
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
Keys
Sym.
OK

- Touch 🗺.

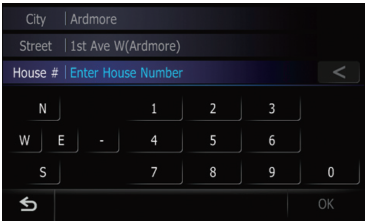
The representative location of the city appears on the map screen.

5 Enter the street name and then touch [OK].

The "**Street Selection**" screen appears.

6 Touch the desired street.

The "**Enter House Number**" screen appears.


City | Ardmore
Street | 1st Ave W(Ardmore)
House # | Enter House Number
<
N 1 2 3
W E - 4 5 6
S 7 8 9 0
OK

7 Enter the house number and then touch [OK].

The "**House Number Selection**" screen appears.

8 Touch the desired house number range.

The searched location appears on the map screen.

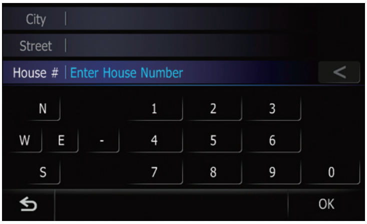
Finding the location by specifying the house number

❐ Depending on the search results, some steps may be skipped.

1 Display the "Address Search" screen.

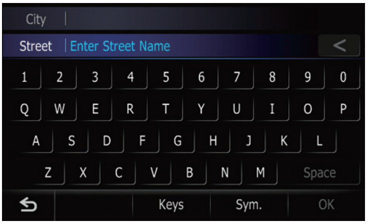
2 Touch [House #].

The "**Enter House Number**" screen appears.


City |
Street |
House # | Enter House Number
<
N 1 2 3
W E - 4 5 6
S 7 8 9 0
OK

3 Enter the house number and then touch [OK].

The "**Enter Street Name**" screen appears.

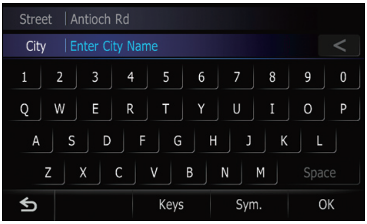

City |
Street | Enter Street Name
<
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M Space
Keys
Sym.
OK

4 Enter the street name and then touch [OK].

The "**Street Selection**" screen appears.

5 Touch the desired street.

The "**Enter City Name**" screen appears.



Street | Antioch Rd

City | Enter City Name

6 Enter the city name and then touch [OK].

The “**Select City**” screen appears.

7 Touch the desired city name.

The “**House Number Selection**” screen appears.

- Touch .

The representative location of the city appears on the map screen.

8 Touch the desired house number range.

The searched location appears on the map screen.

Searching for a name by entering multiple keywords

You can search for a name (such as a city name or a street name) by entering multiple keywords.

❒ Up to three keywords can be entered.

❒ Enter a space between keywords as you want to enter several ones.

The result of search depends on the number of entered keywords.

Entering a keyword

All names containing the word beginning with the entered keyword are displayed as a search result.

Entering two keywords

The names including the following two words below are displayed as a result:

- The word that matches with the first keyword you entered.
- The word beginning with the second keyword.

Entering three keywords

The names including the following two words below are displayed as a result:

- The words that match with both first and second keywords you entered.
- The word beginning with the third keyword.

e.g. Searching “**East West Street**”.

Entered keywords	Search results
EAST W	“**East West Street**” is searchable.
WEST S	“**East West Street**” is searchable.
EAST WEST S	“**East West Street**” is searchable.
WEST STREET E	“**East West Street**” is searchable.
W E S	“**East West Street**” is not searchable.
E WEST STREET	“**East West Street**” is not searchable.

■

Setting up a route to your home

If your home location is stored, the route home can be calculated by touching a single key.

1 Display the “Destination Menu” screen.

2 Touch [Return Home].

“Location confirmation screen” appears.

If the home location has not been stored yet, a confirmation message appears.

- Touch [**Register**].

The “**Set Home**” screen appears.

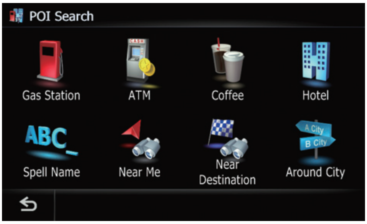
➲ For details, refer to *Registering your home* on page 98. ■

Searching for Points of Interest (POI)

Information about various facilities (Points Of Interest - POI), such as gas stations, parking lots or restaurants, is available. You can search for a POI by selecting the category (or entering the POI Name).
To search for POIs, display the “**POI Search**” screen.

1 Display the “Destination Menu” screen.

2 Touch [POI].
The “**POI Search**” screen appears.



Searching for POIs by specifying a category first

You can search for POIs with a single touch from the preset category.

1 Display the “POI Search” screen.

2 Touch the desired category.
The “**POI List**” screen appears.

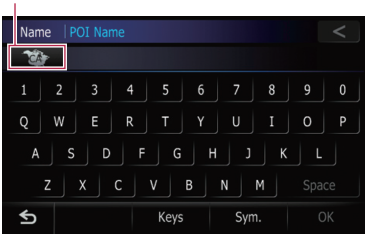
3 Touch the POI you want.
The searched location appears on the map screen.

Searching for a POI directly from the name of the facilities

1 Display the “POI Search” screen.

2 Touch [Spell Name].
The “**POI Name**” screen appears.

State code key



3 Touch the state code key and touch the desired state, province, or territory on the list.
If the location that you want to search for is in another state, province, or territory, this changes the area setting.
- Touch [**Country**] to display the country list.

If the destination is in another country, this changes the country setting.

4 Enter the POI name and then touch [OK].
The “**POI List**” screen appears.

5 Touch the POI you want.
The searched location appears on the map screen.
- Touch [**Sort**].

Each time you touch [**Sort**] changes the sort order.
- ❒ Current order is displayed on the upper right of the screen.
  - ↓:
    Sorts the items in the list in order by distance from the vehicle position.
  - ABC↓:
    Sorts the items in the list alphabetically.

Searching for a nearby POI

You can search for POIs in your surroundings.

1 Display the “POI Search” screen.

2 Touch [Near Me].
POI’s are divided into several categories.

3 Touch the category you want.

The "**POI List**" screen appears.

❒ If there are more detailed categories within the selected category, repeat this step as many times as necessary.

4 Touch the POI you want.

The searched location appears on the map screen.

Searching for POIs around the destination

❒ This function is available when the route is set.

1 Display the "POI Search" screen.

2 Touch [Near Destination].

POI's are divided into several categories.

3 Touch the category you want.

The "**POI List**" screen appears.

❒ If there are more detailed categories within the selected category, repeat this step as many times as necessary.

4 Touch the POI you want.

The searched location appears on the map screen.

Searching for POIs around the city

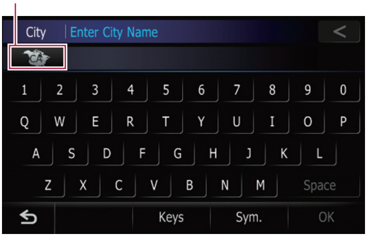
You can search for POIs around a specified city.

1 Display the "POI Search" screen.

2 Touch [Around City].

The "**Enter City Name**" screen appears.

State code key



3 Touch the state code key and touch the desired state, province, or territory on the list.

If the location that you want to search for is in another state, province, or territory, this changes the area setting.

- Touch [**Country**] to display the country list.

If the destination is in another country, this changes the country setting.

4 Enter the city name and then touch [OK].

The "**Select City**" screen appears.

5 Touch the desired city name.

The "**POI List**" screen appears.

- Touch 🗺.

The representative location of the city appears on the map screen.

6 Touch the category you want.

POI's are divided into several categories.

7 Touch the POI you want.

The searched location appears on the map screen. ■

Selecting destination from "Favorites"

Storing locations you visit frequently saves time and effort.

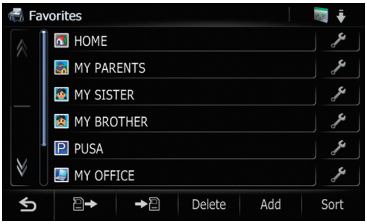
Selecting an item from the list provides an easy way to specify the position.

❒ This function is not available when there is no registered location in "**Favorites**".

➲ For details, refer to *Registering a location into “***Favorites***”* on page 64.

1 The “Destination Menu” screen appears.

2 Touch [Favorites].
The “**Favorites**” screen appears.



3 Touch the entry you want.
The searched location appears on the map screen. ■

Searching for POIs by using the data on the SD memory card

Creating a customized POI is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our website.) Storing the customized POI properly and inserting the SD memory card enables the system to use the data for searches.

1 Insert an SD memory card into the SD card slot.
- ➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the “Destination Menu” screen.

3 Touch [AVIC FEEDS].
POI’s are divided into several categories.

4 Touch the category you want.
The “**Select POI**” screen appears.

5 Touch the POI you want.
The searched location appears on the map screen. ■

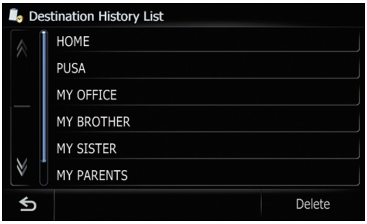
Selecting a location you searched for recently

The places that you have searched for in the past are automatically stored in “**History**”.

- ❒ If no location is stored in Destination History, you cannot select [**History**]. (If you perform a route calculation, you can select [**History**].)
- ❒ “**History**” can store up to 100 locations. If the entries reach the maximum, the new entry overwrites the oldest one.

1 Display the “Destination Menu” screen.

2 Touch [History].
The “**Destination History List**” screen appears.



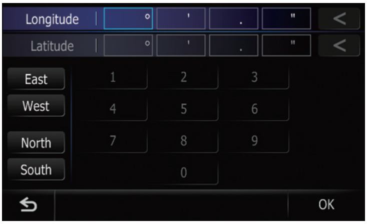
3 Touch the entry you want.
The searched location appears on the map screen. ■

Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

1 Display the “Destination Menu” screen.

2 Touch [Coordinates].
The “**Coordinate Input**” screen appears.


Longitude
°
'
.
"
<
Latitude
°
'
.
"
<
East
West
North
South
1
2
3
4
5
6
7
8
9
0
OK

3 Touch [East] or [West], and then enter the longitude.

To enter W 50°1’2.5” for example, touch [**West**], [0], [5], [0], [0], [1], [0], [2], and [5].

4 Touch [North] or [South], and then enter the latitude.

To enter N 5°1’2.5” for example, touch [**North**], [0], [5], [0], [1], [0], [2], and [5].

5 Touch [OK].

The searched location appears on the map screen. ■

Registering a location into "Favorites"

Registering a location by "Favorites"

Favorites can store up to 400 registered locations. These can include your home location, favorite places, and destinations you have already registered.

1 Display the "Destination Menu" screen.

2 Touch [Favorites].

The "**Favorites**" screen appears.

3 Touch [Add].

The "**Select Search method**" screen appears.

4 Search for a location.

- ➲ For details about the search methods, refer to Chapter 8.

5 When the map of the location you want to register is displayed, touch [OK].

The location is registered, and then the "**Edit Favorite**" screen appears.

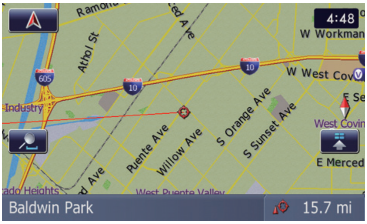
- ➲ For details, refer to *Editing the entry in "***Favorites***"* on this page.

6 Touch [OK].

The registration is completed.

Registering a location by scroll mode

1 Touch and drag the screen to scroll the map to the position that you want to register.


Ramona
Athol St
4:48
W Workman
605
10
10
W West Cov
E Se
Industry
West Covin
S Orange Ave
S Sunset Ave
Puente Ave
Willow Ave
E Merced
West Puente Valley
Baldwin Park
15.7 mi

2 Touch to display the Quick Access menu.

3 Touch .

The location is registered, and then the "**Edit Favorite**" screen appears.

- ➲ For details, refer to *Editing the entry in "***Favorites***"* on this page.

4 Touch [OK].

The registration is completed. ◘

Editing registered locations

Editing the entry in "Favorites"

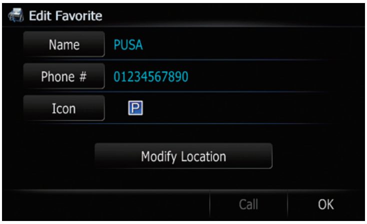
1 Display the "Destination Menu" screen.

2 Touch [Favorites].

The "**Favorites**" screen appears.

3 Touch next to the location that you want to edit.

The "**Edit Favorite**" screen appears.


Edit Favorite

Name: PUSA
Phone #: 01234567890
Icon: P

Modify Location
Call
OK

4 Touch [Name].

You can enter the desired name.

- ❒ Up to 17 characters can be input for the name.

- ■ Touch [**Phone #**].

You can edit the registered phone number. To dial the number, touch [**Call**].

- ■ Touch [**Icon**].

You can change the symbol displayed on the map and "**Favorites**".

- ■ Touch [**Modify Location**].

You can change the registered location by scrolling the map.

Editing your home

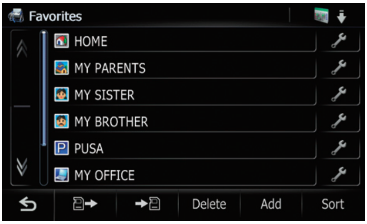
When you have already registered your home, you can edit the information of your home.

1 Display the "Destination Menu" screen.

2 Touch [Favorites].

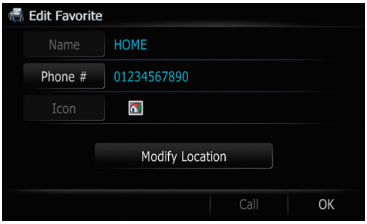
The "**Favorites**" screen appears.

❒ Home location is displayed on the top of the list.


Favorites
HOME
MY PARENTS
MY SISTER
MY BROTHER
PUSA
MY OFFICE
Delete
Add
Sort

3 Touch next to the home location.

The "**Edit Favorite**" screen appears.


Edit Favorite
Icon
Modify Location
Call
OK

Name HOME
Phone # 01234567890

- Touch [**Phone #**].

You can edit the registered phone number. To dial the number, touch [**Call**].

- Touch [**Modify Location**].

You can change the registered location by scrolling the map.

4 Touch [OK].

The registration is completed.

Sorting the entry in "Favorites"

1 Display the "Destination Menu" screen.

2 Touch [Favorites].

The "**Favorites**" screen appears.

3 Touch [Sort].

Each time you touch [**Sort**] changes the sort order.

❒ Current order is displayed on the upper right of the screen.

- :
  Sorts the items in the list in order by distance from the vehicle position.
- ABC:
  Sorts the items in the list alphabetically.
- :
  Sorts the items in the list in order of the recently used items.

Deleting the entry in "Favorites"

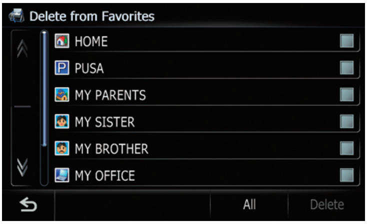
1 Display the "Destination Menu" screen.

2 Touch [Favorites].

The "**Favorites**" screen appears.

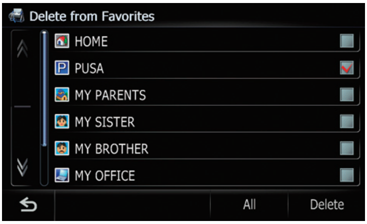
3 Touch [Delete].

The "**Delete from Favorites**" screen appears.


Delete from Favorites
HOME ☐
PUSA ☐
MY PARENTS ☐
MY SISTER ☐
MY BROTHER ☐
MY OFFICE ☐
All
Delete

4 Select the location you want to delete.

A check mark appears by the selected location.


Delete from Favorites
HOME ☐
PUSA ☑
MY PARENTS ☐
MY SISTER ☐
MY BROTHER ☐
MY OFFICE ☐
All
Delete

- Touch [**All**].

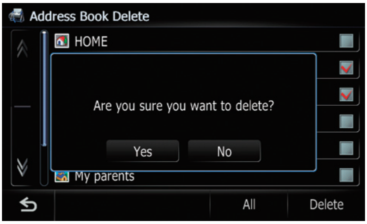
Selects all entries.

- Touch [**None**].

Displayed when all locations are selected. Cancels all selected locations.

5 Touch [Delete].

A message will appear asking you to confirm the deletion.



Are you sure you want to delete?

6 Touch [Yes].

The data you selected is deleted.

- Touch [**No**].

Cancels the deletion. ■

Exporting and importing the entry in “Favorites”

Exporting the entry in “Favorites”

Exporting the “**Favorites**” data to an SD memory card for editing is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC.

❒ If there is a previous data in the SD memory card, the data is overwritten with new data when current data is exported.

1 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the “Destination Menu” screen.

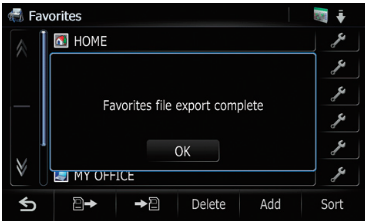
3 Touch [Favorites].

The “**Favorites**” screen appears.

4 Touch ➔▯.

Data export starts.

After exporting the data is finished, the following message appears.



Favorites file export complete

5 Touch [OK].

The “**Favorites**” screen appears.

Importing the “Favorites” items edited on AVIC FEEDS

You can import the locations that you have edited on the utility program “AVIC FEEDS” which is available separately to “**Favorites**”.

❒ When a location that is already registered in “**Favorites**” is imported, the location is overwritten.

1 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

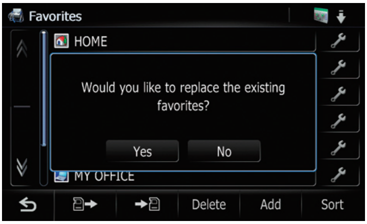
2 Display the “Destination Menu” screen.

3 Touch [Favorites].

The “**Favorites**” screen appears.

4 Touch ▯➔.

The following message appears.



Would you like to replace the existing favorites?

5 Touch [Yes].

Data import starts.

After importing the data is finished, the "**Favorites**" screen appears. ■

Deleting an entry in "History"

Items in **History** can be deleted. All entries in **History** can be deleted at once.

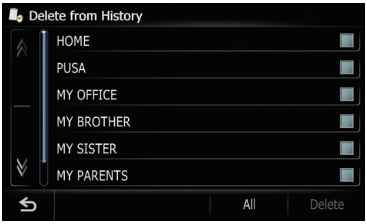
1 Display the "Destination Menu" screen.

2 Touch [History].

The "**Destination History List**" screen appears.

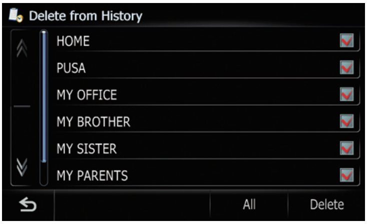
3 Touch [Delete].

The "**Delete from History**" screen appears.


Delete from History
HOME ☐
PUSA ☐
MY OFFICE ☐
MY BROTHER ☐
MY SISTER ☐
MY PARENTS ☐
All
Delete

4 Select the location you want to delete.

A check mark appears by the selected location.


Delete from History
HOME ☑
PUSA ☑
MY OFFICE ☑
MY BROTHER ☑
MY SISTER ☑
MY PARENTS ☑
All
Delete

- Touch [**All**].

Selects all entries.

- Touch [**None**].

Displayed when all locations are selected. Cancels all selected locations.

5 Touch [Delete].

A message will appear asking you to confirm the deletion.

6 Touch [Yes].

The data you selected is deleted.

- Touch [**No**].

Cancels the deletion. ■

If you have an active subscription to MSN Direct service, you can check and browse various information on your navigation system, such as gas prices, movie times, weather conditions and traffic information. The information will be updated periodically.

IMPORTANT:
To receive MSN® Direct on an MSN Direct-ready device, you must be within an MSN Direct coverage area; see http://www.msndirect.com/pioneer for current coverage maps. Coverage areas are affected by reception limitations of the FM network as well as other factors, which may affect the ability to receive FM broadcasts. Coverage areas are subject to change. Not all content is available in all coverage areas.
© 2008 Microsoft Corporation. All rights reserved. Microsoft, MSN, and the MSN logo are trademarks of the Microsoft group of companies.

Notice about MSN Direct
Pioneer is not responsible for the accuracy of the MSN Direct content. The MSN Direct content may not be current or available at times, and is subject to change without notice.

Activating the service

You have to activate MSN Direct first.

- ❐ A web-connected computer is required for the online subscription.
- ❐ If you have difficulty for the online subscription, please call toll-free 1-866-658-7032.

General flow chart:

1 Check your product key.
You have to know your product key for the subscription.
(Refer to *Checking your product key* on this page.)
⬇
2 Make an online subscription to MSN Direct service using your PC.
(Refer to *Subscribing to the MSN Direct service* on the next page.)
⬇
3 Activate the MSN Direct service on this product.
(Refer to *Activating the MSN Direct function* on the next page.)
⬇
4 Activation is complete.

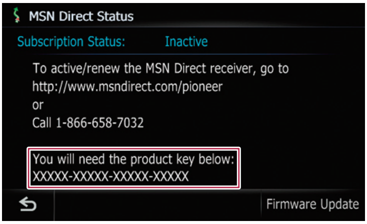
Checking your product key

The product key that you can find here is used in the online subscription.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].
The "**MSN Direct**" screen appears.

2 Touch [Status].

3 Write your product key down in the following box:


MSN Direct Status
Subscription Status: Inactive
To active/renew the MSN Direct receiver, go to
http://www.msndirect.com/pioneer
or
Call 1-866-658-7032
You will need the product key below:
XXXXX-XXXXX-XXXXX-XXXXX

Subscribing to the MSN Direct service

Within two days of completing the subscription, execute *Activating the MSN Direct function*.

1 Access the following URL and read the description.
http://www.msndirect.com/pioneer

2 Be sure to check the coverage area and other availabilities of MSN Direct on the web page.

3 Go to the page for activation and enter your product key.

4 Follow the directions on the web page to complete the subscription.

Activating the MSN Direct function

After the online subscription, complete the activation so that the navigation system can receive the information.

This operation must be performed under the following conditions:

— You are currently in the coverage area of MSN Direct.

1 Boot-up your navigation system.

2 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

The "**MSN Direct**" screen appears.

3 Touch [Status].

4 Wait until the activation status changes to "Active".

It may take approximately 20 or 30 minutes to complete the activation.

After activation is complete, the information will be available on each menu. ■

Browsing gas prices

Recent gas prices of nearby gas stations are displayed in a list.

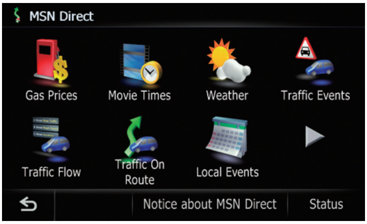
Although the MSN Direct service regularly updates gas price information, the information provided may not necessarily correspond to actual gas prices. Please refer to *Notice about MSN Direct* on the previous page.

It may take up to 24 hours for all the data to become available under the following conditions:

- When you use MSN Direct for the first time.
- When you have not performed this function previously around the current area.
- After the navigation system has been turned off for a few days.

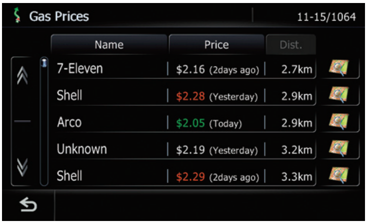
1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

The "**MSN Direct**" screen appears.



2 Touch [Gas Prices].

The "**Gas Prices**" screen appears.


Gas Prices 11-15/1064

Name	Price	Dist.
7-Eleven	$2.16 (2days ago)	2.7km
Shell	$2.28 (Yesterday)	2.9km
Arco	$2.05 (Today)	2.9km
Unknown	$2.19 (Yesterday)	3.2km
Shell	$2.29 (2days ago)	3.3km

3 Touch the desired tab to change the sort order.

Available options:

- [**Dist.**] (default):
  Sorts the items in the list in order by distance from the vehicle position.
- [**Name**]:
  Sorts the items in the list alphabetically.
- [**Price**]:

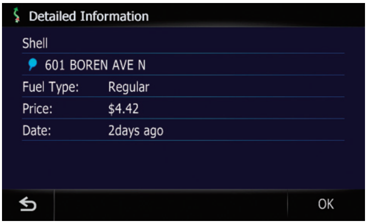
Sorts the items in the list by price.

- Touch [**Refresh**].

The information is updated.

❒ [**Refresh**] appears when new gas prices information is received.

4 Touch on the item that you want to view in detail.



Shell
601 BOREN AVE N
Fuel Type: Regular
Price: $4.42
Date: 2days ago

- Touch 🗺.

"Location confirmation screen" appears.

➲ For details, refer to *Checking the location on the map* on page 50.

5 Touch [OK].

"Location confirmation screen" appears.

➲ For details, refer to *Checking the location on the map* on page 50. ■

Browsing movie times

Nearby theaters can be displayed on a list. Switching the screen allows you to see the movie title now showing.

Although the MSN Direct service regularly updates movie information, the information provided may not necessarily correspond to actual movie information. Please refer to *Notice about MSN Direct* on page 68.

It may take up to six hours for all the data to become available under the following conditions:

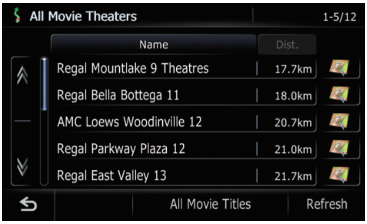
- When you use MSN Direct for the first time.
- When you have not performed this function previously around the current area.
- After the navigation system has been turned off for a few days.

Searching for a theater by selecting a movie title

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Movie Times].

The "**All Movie Theaters**" screen appears.



Name	Dist.
Regal Mountlake 9 Theatres	17.7km
Regal Bella Bottega 11	18.0km
AMC Loews Woodinville 12	20.7km
Regal Parkway Plaza 12	21.0km
Regal East Valley 13	21.7km

3 Touch [All Movie Titles].

The movie titles now showing are displayed.

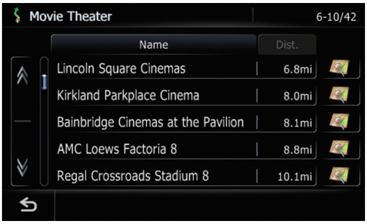
- Touch [**Refresh**].

The information is updated.

❒ [**Refresh**] appears when the new information is received.

4 Touch the desired movie title.

The theaters that are currently showing the selected movie are displayed.



Name	Dist.
Lincoln Square Cinemas	6.8mi
Kirkland Parkplace Cinema	8.0mi
Bainbridge Cinemas at the Pavilion	8.1mi
AMC Loews Factoria 8	8.8mi
Regal Crossroads Stadium 8	10.1mi

- Touch [**Refresh**].

The information is updated.

❒ [**Refresh**] appears when the new information is received.

5 Touch the desired tab to change the sort order.

Available options:

- [**Dist.**] (default):
  Sorts the items in the list in order by distance from the vehicle position.

- [**Name**]:
  Sorts the items in the list alphabetically.

6 Touch on the item that you want to view in detail.

■ Touch 🗺.

“Location confirmation screen” appears.

➲ For details, refer to *Checking the location on the map* on page 50.

7 Touch [OK].

“Location confirmation screen” appears.

➲ For details, refer to *Checking the location on the map* on page 50.

■ Touch [**Call**].

Enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.)

Searching for a movie title by selecting a theater

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Movie Times].

The “**All Movie Theaters**” screen appears.

3 Touch the desired tab to change the sort order.

Available options:

- [**Dist.**] (default):
  Sorts the items in the list in order by distance from the vehicle position.
- [**Name**]:
  Sorts the items in the list alphabetically.

4 Touch the desired theater.

The movie titles currently shown on the selected theater are displayed.

■ Touch 🗺.

“Location confirmation screen” appears.

➲ For details, refer to *Checking the location on the map* on page 50.

■ Touch [**Refresh**].

The information is updated.

❐ [**Refresh**] appears when the new information is received.

5 Touch on the item that you want to view in detail.

6 Touch [OK].

“Location confirmation screen” appears.

➲ For details, refer to *Checking the location on the map* on page 50.

■ Touch [**Call**].

Enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.) ■

Browsing weather information

Local weather information can be displayed on a list. Switching the screen allows you to see worldwide weather conditions.

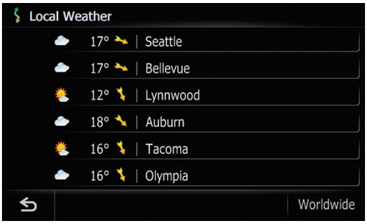
> Although the MSN Direct service regularly updates weather information, the information provided may not necessarily correspond to actual weather conditions. Please refer to *Notice about MSN Direct* on page 68.

Checking the local weather information

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Weather].

The local weather information is displayed.

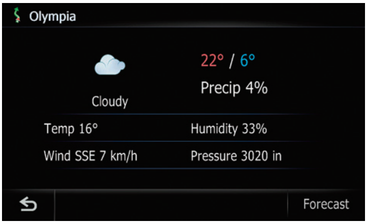


17° | Seattle
17° | Bellevue
12° | Lynnwood
18° | Auburn
16° | Tacoma
16° | Olympia

The city name, weather, temperature and wind direction are displayed in list format.

3 Touch the desired area.

Detailed information is displayed.



Cloudy
22° / 6°
Precip 4%
Temp 16°
Humidity 33%
Wind SSE 7 km/h
Pressure 3020 in

Touching [**Forecast**] displays the weather forecasts for these three days.

Checking worldwide weather conditions

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Weather].

The local weather information is displayed.

3 Touch [Worldwide].

Worldwide weather conditions are displayed. The area names and weather conditions are displayed on the list. The list is sorted alphabetically by the area name.

4 Touch the desired area.

Detailed information is displayed. ■

Using traffic information

You can view current traffic conditions and information. When the navigation system receives updated traffic information, it will overlay the traffic information on your map and also display detailed text information when available.
In the default setting, the navigation system takes into account traffic information and tries to avoid traffic congestions and suggest better routes. Also, when you are traveling along a route and the system finds another better route for avoiding the traffic congestion, the current route will be recalculated automatically.
The term “traffic congestion” in this section indicates the following types of traffic conditions:
— Stop-and-go traffic
— Stopped traffic
— Closed/blocked roads

Viewing the traffic event

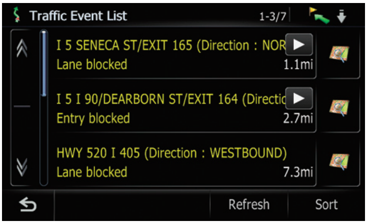
Traffic Information is displayed on a screen in the form of a list. This allows you to check how many traffic incidents have occurred, their location and their distance from your current position.

> Although the MSN Direct service regularly updates traffic information, the information provided may not necessarily correspond to actual traffic conditions. Please refer to *Notice about MSN Direct* on page 68.

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Traffic Events].

The “**Traffic Event List**” screen appears.



Traffic Event List 1-3/7

I 5 SENECA ST/EXIT 165 (Direction : NOR
Lane blocked 1.1mi

I 5 I 90/DEARBORN ST/EXIT 164 (Directic
Entry blocked 2.7mi

HWY 520 I 405 (Direction : WESTBOUND)
Lane blocked 7.3mi

3 Select an incident you want to view in detail.

The details of the selected incident are displayed.

- ❒ Touching an incident you want to see allows you to view the detailed information of the incident. If the information cannot be displayed on one screen, touch ▼ or ▲ to view the remaining information.

■ Touch [**Sort**].

You can sort the traffic information.

Each time you touch the key changes that setting.

- ↘⇣ :
  You can sort the traffic information by distance from your current position.
  For the list displayed when you touch [**Traffic Events**], the list will be sorted according to the linear distance from the vehicle position to the traffic information.
  For the list displayed when you touch [**Traffic On Route**], the list will be sorted according to the distance from the vehicle position to the traffic information.
- ABC⇣ :
  You can sort the traffic information in alphabetical order.
- ◆⇣ :
  You can sort the traffic information according to the incident.
  The list will be sorted in the order of closed/ blocked roads, traffic congestion, accidents, road works and others.

Current order is displayed on the upper right of the screen.

■ Touch [**Refresh**].

When new traffic information is received, current information is changed or old information has been removed, the list is updated to reflect the new situation.

■ Touch 🗺.

Touching 🗺 allows you to check the location on a map. (Traffic information without positional information cannot be checked on a map.)

4 Touch ↩.

The previous screen returns.

Checking traffic information on the route

All traffic information on the current route is displayed on screen in a list.

● Touch [Traffic On Route].

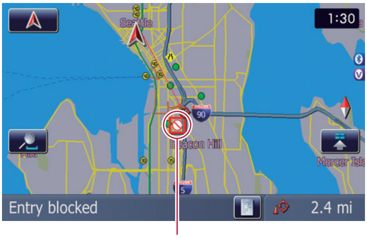
The "**Traffic On Route**" screen appears.

The method for checking the content displayed on the screen is the same for *Viewing the traffic event* on the previous page.

How to read traffic information on the map

The traffic event information displayed on the map is as follows.

- ❒ A line is displayed only when the map scale is 2.5 miles (5 km) or lower.
- ❒ Icon appears only when the scale on the map is 10 miles (20 km) or lower. If the scale is changed, the icons are resized according to the selected scale.



Traffic event icon

- ◆ ◆ with yellow line:
  Stop-and-go traffic
- ◆ with red line:
  Stopped traffic

- 🚫 with black line:
  Closed/blocked roads
- ⚠ etc.:
  Accidents, constructions, etc.

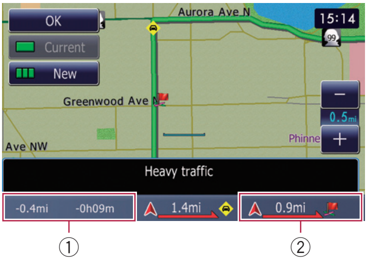
Setting an alternative route to avoid traffic congestion

The navigation system checks whether or not there is the traffic information on your route at regular time intervals. If the navigation system detects any traffic jams on your current route, the system tries to find a better route in the background.

❒ The following types of traffic incidents on the route will be checked: slow, queuing and stationary traffic, and closed/blocked roads.

Checking for traffic congestion automatically

If there is information about traffic congestion on your current route and if an alternative route can be found, the navigation system will recommend a new alternative route automatically. In such a case, the following screen will appear.



Heavy traffic

① Distance from the current position of your vehicle to the point of entry into the new route.
② Difference in distance and travel time between the existing route and new route.

❒ There is no action if the system cannot find any traffic congestion information on your route or the system cannot find an alternative.

1 Touch [New].

The recommended route is displayed on the screen.

■ Touch [**Current**].

The current route is displayed on the screen.

2 Touch [OK].

The displayed route is set.

❒ When no selection is made, the screen returns to the previous screen.

Checking traffic information manually

Touching the notification icon on the map screen allows you to check traffic information on your route while the icon is displayed. The notification icon is only displayed on the navigation map screen if there is any traffic information on your route.

❒ The notification icon is not available if your vehicle deviates from the route.

1 Set [Show Traffic Incident] to [View].

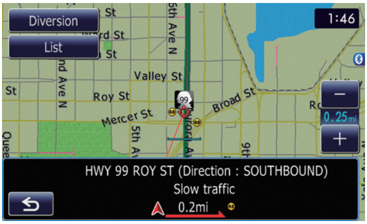
➲ For details, refer to **Show Traffic Incident** on page 45.

2 Display the map screen.

The icon appears when the system acquires traffic information on the current route.

3 Touch the icon while the icon is displayed.

Traffic information on the current route is displayed on the map screen.



HWY 99 ROY ST (Direction : SOUTHBOUND)
Slow traffic

4 Touch [Diversion] to search for an alternative route.

After touching [**Diversion**], the route is recalculated taking all traffic congestion on your current route into account.

- ❒ [**Diversion**] will be enable only when the system can find “traffic congestion”.
- ❒ “Notification icon” shows the nearest traffic information on the route. However, if you touch [**Diversion**], the route is recalculated by taking into account not only this information, but also all traffic congestion information on the route.

For the subsequent operations, see “*Checking for traffic congestion automatically*”.

➲ For details, refer to *Checking for traffic congestion automatically* on the previous page.

- ■ Touch [**List**].

The “**Traffic On Route**” screen appears.

- ■ Touch ↩.

The message disappears, and the map display reappears.

Viewing the traffic flow

Traffic Information is displayed on a screen in the form of a list. This allows you to check how many traffic incidents have occurred, their location and their distance from your current position.

> Although the MSN Direct service regularly updates traffic information, the information provided may not necessarily correspond to actual traffic conditions. Please refer to *Notice about MSN Direct* on page 68.

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Traffic Flow].

A list with traffic flow information that has been received is shown. The list is sorted by distance from your current position.

Places (street names) where incidents have occurred are displayed on the list.

3 Select an incident you want to view in detail.

The details of the selected incident are displayed.

- ❒ Touching an incident you want to see allows you to view the detailed information of the incident. If the information cannot be displayed on one screen, touch ▼ or ▲ to view the remaining information.

- ■ Touch [**Sort**].

You can sort the traffic information.

Each time you touch the key changes that setting.

- ↓:
  You can sort the traffic information by distance from your current position.
  For the list displayed when you touch [**Traffic Events**], the list will be sorted according to the linear distance from the vehicle position to the traffic information.
  For the list displayed when you touch [**Traffic On Route**], the list will be sorted according to the distance from the vehicle position to the traffic information.
- ABC↓:
  You can sort the traffic information in alphabetical order.
- ↓:
  You can sort the traffic information according to the incident.
  The list will be sorted in the order of closed/blocked roads, traffic congestion, accidents, road works and others.

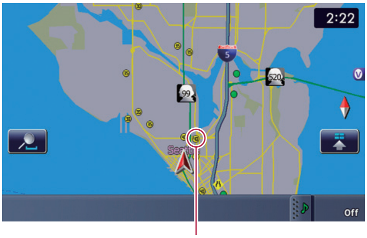
Current order is displayed on the upper right of the screen.

- ■ Touch [**Refresh**].

When new traffic information is received, current information is changed or old information has been removed, the list is updated to reflect the new situation.

- ■ Touch ▨.

The traffic event information displayed on the map is as follows.



Traffic flow icon and line

- **Red:** average speed in this area is slower than 15 mph (24 km/h)
- **Yellow:** average speed in this area is between 15 mph to 45 mph (24 km/h to 72 km/h)
- **Green:** average speed in this area is faster than 45 mph (72 km/h) (An icon without a line will be displayed)

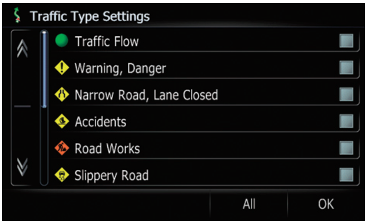
Selecting traffic information to display

There are different types of traffic information that can be received via the MSN Direct service, and you can select which types will be incorporated and displayed on your navigation system.

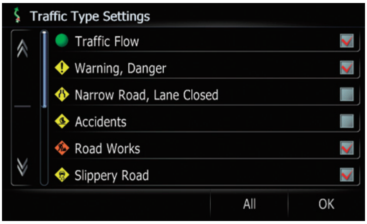
1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Traffic Settings].
The "**Traffic Settings**" screen appears.

3 Touch [Displayed Traffic Information].
The "**Traffic Type Settings**" screen appears.


Traffic Type Settings
Traffic Flow ☐
Warning, Danger ☐
Narrow Road, Lane Closed ☐
Accidents ☐
Road Works ☐
Slippery Road ☐

4 Touch the traffic information item to display.
A check mark appears by the selected traffic information.


Traffic Type Settings
Traffic Flow ☑
Warning, Danger ☑
Narrow Road, Lane Closed ☐
Accidents ☐
Road Works ☑
Slippery Road ☑

❒ Touching [**All** (**None**)] selects or deselects all traffic information.

■ Touch [**All**].
Selects all traffic information.

■ Touch [**None**].
Displayed when all traffic information are selected. Cancels all selected traffic information.

5 Touch [OK].
The selected traffic information icon is added to the screen.

6 Touch [OK]. ■

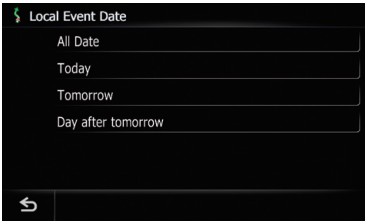
Browsing local events

The nearby events to be held in the next few days are displayed on a list, and you can see the detail event information.

Although the MSN Direct service regularly updates local event information, the information provided may not necessarily correspond to actual local event conditions. Please refer to *Notice about MSN Direct* on page 68.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

2 Touch [Local Events].
The "**Local Event Date**" screen appears.



3 Touch the date on which you want to check the events.

The "**Local Event Groups List**" screen appears.

4 Touch the category of events that you want to check.

The "**Local Event Sub Groups List**" screen appears.

5 Touch the subcategory of events that you want to check.

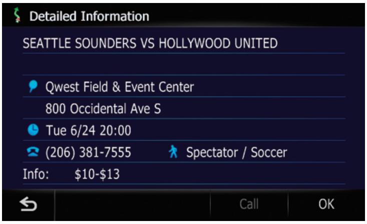
The "**Local Events**" screen appears.

6 Touch the desired tab to change the sort order.

Available options:

- [**Dist.**] (default):
  Sorts the items in the list in order by distance from the vehicle position.
- [**Name**]:
  Sorts the items in the list alphabetically.

7 Touch the desired event to display detailed information of the event.



SEATTLE SOUNDERS VS HOLLYWOOD UNITED

Qwest Field & Event Center
800 Occidental Ave S
Tue 6/24 20:00
(206) 381-7555 Spectator / Soccer
Info: $10-$13

- Touch 🗺.

"Location confirmation screen" appears.

➲ For details, refer to *Checking the location on the map* on page 50.

- Touch [**Refresh**].

The information is updated.

❒ [**Refresh**] appears when the new information is received.

8 Touch [OK].

"Location confirmation screen" appears.

➲ For details, refer to *Checking the location on the map* on page 50.

- Touch [**Call**].

Enables you to call the position if a telephone number is available. (Pairing with cellular phone featuring Bluetooth wireless technology is required.) ■

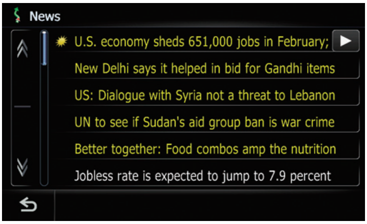
Browsing news headlines

Recent news headlines are displayed in a list.

Although the MSN Direct service regularly updates news headlines, the information provided may not necessarily correspond to current news headlines. Please refer to *Notice about MSN Direct* on page 68.

1 Touch [Destination] on the "Top Menu", and then touch [MSN Direct].

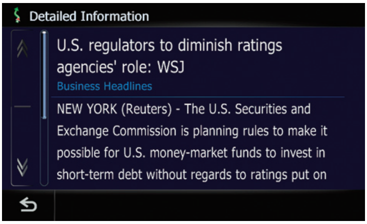
2 Touch [News].



U.S. economy sheds 651,000 jobs in February;
New Delhi says it helped in bid for Gandhi items
US: Dialogue with Syria not a threat to Lebanon
UN to see if Sudan's aid group ban is war crime
Better together: Food combos amp the nutrition
Jobless rate is expected to jump to 7.9 percent

3 Touch the desired news headline.

Further details about the news are displayed.



U.S. regulators to diminish ratings agencies' role: WSJ

Business Headlines

NEW YORK (Reuters) - The U.S. Securities and Exchange Commission is planning rules to make it possible for U.S. money-market funds to invest in short-term debt without regards to ratings put on

- Touch [**Refresh**].

The information is updated.

❒ [**Refresh**] appears when the new information is received.

4 Touch ▲ or ▼ to scroll the list. ■

Browsing stock quotes

Recent stock quotes are displayed in a list.

Although the stock quote displayed onscreen is updated about 40 minutes (approx.), these prices are not realtime values.
It may take up to 20 minutes for all the data to become available under the following conditions:

- When you use MSN Direct for the first time.
- When you have not performed this function previously around the current area.
- After the navigation system has been turned off for a few days.

➲ Please refer to *Notice about MSN Direct* on page 68.

Selecting stock symbols

Up to 30 stock symbols can be selected.

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Stocks].

The “**Stock Info**” screen appears.

❒ The seven stock indices is always selected and displayed on the bottom of the list.

3 Touch [Add].

The “**Stock Info**” screen appears.

4 Enter the stock symbol that you want to select, and then touch [OK].

The selected stock symbol is added to the “**Stock Info**” screen.

❒ Arrow in the left of each item indicates the stock price movement. If there is no stock price movements than previous close, “—” is displayed.

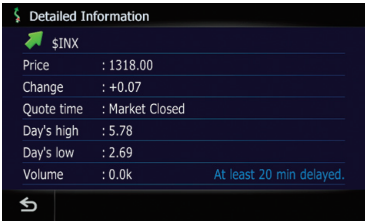
Viewing the detailed stock quotes

1 Touch [Destination] on the “Top Menu”, and then touch [MSN Direct].

2 Touch [Stocks].

3 Touch the desired stock quote.

Detailed stock quote information is displayed.



$INX

Price	: 1318.00
Change	: +0.07
Quote time	: Market Closed
Day's high	: 5.78
Day's low	: 2.69
Volume	: 0.0k

At least 20 min delayed.

- Touch [**Delete**].

The message confirming whether to delete the entry appears.
And then touch [**OK**] to delete the stock symbol from the “**Stock Info**” screen. ■

If your devices feature Bluetooth® technology, this navigation system can be connected to your devices wirelessly. This section describes how to set up a Bluetooth connection.

For more information about the connectivity with the devices featuring Bluetooth wireless technology, refer to the information on our website.

Preparing communication devices

This navigation system has a built-in function to use devices featuring Bluetooth wireless technology.

➲ For details, refer to *Notes for hands-free phoning* on page 92.

You can register and use devices that feature the following profiles with this navigation system.

- HFP (Hands Free Profile)
- A2DP (Advanced Audio Distribution Profile)

❐ When the navigation system is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously-connected cellular phone. Even when the connection is severed for some reason, the system automatically reconnects the specified cellular phone (except when the connection is severed due to cellular phone operation). ■

Registering your Bluetooth devices

You need to register your devices featuring Bluetooth wireless technology when you connect it for the first time. A total of 5 devices can be registered. Three registration methods are available:

- Searching for nearby Bluetooth devices
- Searching for a specified Bluetooth device
- Pairing from your Bluetooth devices

❐ If you try to register more than 5 devices, the system will ask you to select one of the registered devices to delete.
  ➲ For details, refer to *Deleting a registered device* on page 82.

To register your Bluetooth devices, display the "**Bluetooth Settings**" screen.

1 Press the HOME button to display the "Top Menu".

2 Touch [Settings].

The "**Settings Menu**" screen appears.

3 Touch [Bluetooth Settings].

The "**Bluetooth Settings**" screen appears.

Searching for nearby Bluetooth devices

The system searches for available Bluetooth devices near the navigation system, displays them in a list, and registers them for connection.

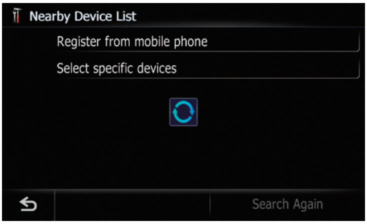
1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the "Bluetooth Settings" screen.

3 Touch [Registration].

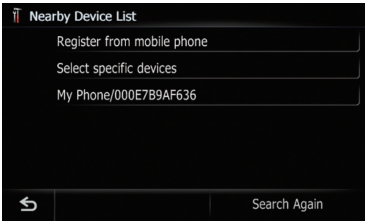
The "**Nearby Device List**" screen appears.



The system searches for devices featuring Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

❒ Up to 30 devices will be listed in the order that the devices are found.

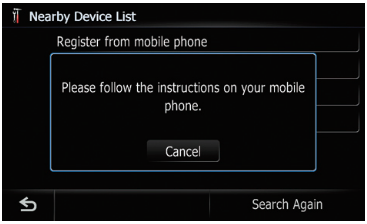
4 Wait until your Bluetooth device appears in the list.


Nearby Device List
Register from mobile phone
Select specific devices
My Phone/000E7B9AF636
Search Again

❒ If you cannot find the Bluetooth device that you want to connect, check that the device is waiting for the Bluetooth wireless technology connection.

5 Touch the Bluetooth device name you want to register.

The message "**Please follow the instructions on your mobile phone.**" appears.


Nearby Device List
Register from mobile phone
Cancel
Search Again

Please follow the instructions on your mobile phone.

6 Enter the PIN code (the default PIN code is "1111") using the Bluetooth device.

The device is registered in the navigation system.

After the device is successfully registered, the Bluetooth connection is established from the navigation system.

❒ If the registered device features HFP, the hands-free connection is made.

❒ If the registered device features A2DP, Bluetooth Audio connection is made.

❒ If the registered device features both HFP and A2DP, the hands-free connection is made and then the Bluetooth Audio connection is made.

Searching for a specified Bluetooth device

If you cannot connect your Bluetooth device using [**Select specific devices**] and [**Register from mobile phone**], try this method if your Bluetooth device is found in the list.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

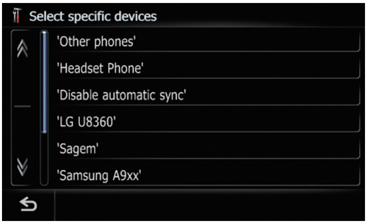
2 Display the "Bluetooth Settings" screen.

3 Touch [Registration].

The "**Nearby Device List**" screen appears.

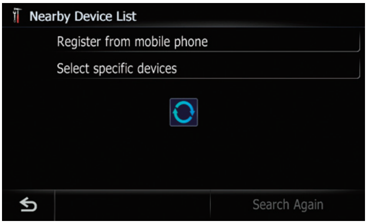
4 Touch [Select specific devices].

The "**Select specific devices**" screen appears.


Select specific devices
'Other phones'
'Headset Phone'
'Disable automatic sync'
'LG U8360'
'Sagem'
'Samsung A9xx'

5 Touch the Bluetooth device name to be connected.

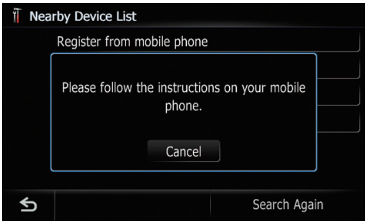
The system searches for devices featuring Bluetooth technology that are waiting for the connection and displays them in the list if a device is found.


Nearby Device List
Register from mobile phone
Select specific devices
Search Again

- ❒ If you cannot find the desired device name on the list, touch [**Other phones**] to search the devices available nearby.

6 Touch the Bluetooth device name you want to register.

The message "**Please follow the instructions on your mobile phone.**" appears.


Nearby Device List
Register from mobile phone
Cancel
Search Again

Please follow the instructions on your mobile phone.

7 Enter the PIN code (the default PIN code is "1111") using the Bluetooth device.

The device is registered in the navigation system.

After the device is successfully registered, the Bluetooth connection is established from the navigation system.

- ❒ If the registered device features HFP, the hands-free connection is made.
- ❒ If the registered device features A2DP, Bluetooth Audio connection is made.
- ❒ If the registered device features both HFP and A2DP, the hands-free connection is made and then the Bluetooth Audio connection is made.

Pairing from your Bluetooth devices

You can register the Bluetooth device by setting the navigation system to standby mode and requesting connection from the Bluetooth device.

1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

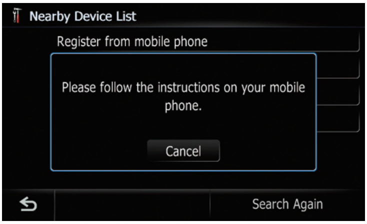
2 Display the "Bluetooth Settings" screen.

3 Touch [Registration].

The "**Nearby Device List**" screen appears.

4 Touch [Register from mobile phone].

The navigation system waits for a Bluetooth wireless technology connection.


Nearby Device List
Register from mobile phone
Cancel
Search Again

Please follow the instructions on your mobile phone.

5 Register the navigation system on your Bluetooth device.

If your device asks you to enter a password, enter the PIN code (password) of the navigation system.

When the device is successfully registered, the connection settings are made from the device.

- ❒ If registration fails, repeat the procedure from the beginning.

Deleting a registered device

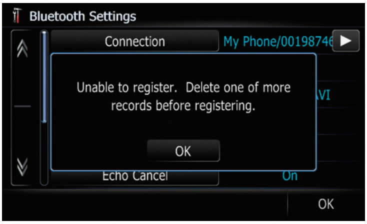
When you have already registered 5 Bluetooth devices and you want to add another one, you must first delete one of the registered devices.

❒ If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

1 Display the “Bluetooth Settings” screen.

2 Touch [Registration].

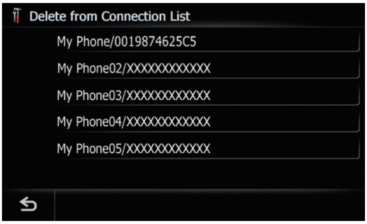
The following message appears.


Bluetooth Settings
Connection
My Phone/00198746
VI
OK
Echo Cancel
On
OK

Unable to register. Delete one of more records before registering.

3 Touch [OK].

The “**Delete from Connection List**” screen appears.


Delete from Connection List
My Phone/0019874625C5
My Phone02/XXXXXXXXXXXX
My Phone03/XXXXXXXXXXXX
My Phone04/XXXXXXXXXXXX
My Phone05/XXXXXXXXXXXX

4 Touch the Bluetooth device name that you want to delete.

The registration is canceled. ■

Connecting a registered Bluetooth device

The navigation system automatically connects the Bluetooth device selected as the target of connection. However, connect the Bluetooth device manually in the following cases:

- Two or more Bluetooth devices are registered, and you want to manually select the device to be used.
- You want to reconnect a disconnected Bluetooth device.
- Connection cannot be established automatically for some reason.

If you start connection manually, carry out the following procedure. You can also connect the Bluetooth device by having the navigation system detect it automatically.

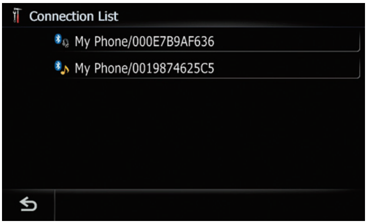
1 Activate the Bluetooth wireless technology on your devices.

For some Bluetooth devices, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your devices.

2 Display the “Bluetooth Settings” screen.

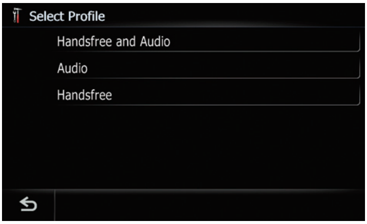
3 Touch [Connection].

The “**Connection List**” screen appears.


Connection List
My Phone/000E7B9AF636
My Phone/0019874625C5

4 Touch the name of the device that you want to connect.

The “**Select Profile**” screen appears.


Select Profile
Handsfree and Audio
Audio
Handsfree

5 Touch the profile that you want to connect.

You can select the following profiles:

- [**Handsfree and Audio**]:
  Connects the device as the hands-free phone and the Bluetooth audio player.
- [**Audio**]:
  Connects the device as Bluetooth audio player.
- [**Handsfree**]:
  Connects the device as the hands-free phone.

Connection starts.

When a connection is successfully established, a connection complete message appears, the screen returns to the map screen by touching [**OK**].

- ❒ To cancel the connection to your device, touch [**Cancel**].
- ❒ The selected device is set for priority connecting.
- ❒ If connection fails, check whether your device is waiting for a connection and then retry. ■

⚠ CAUTION

For your safety, avoid talking on the phone as much as possible while driving.

If your cellular phone features Bluetooth technology, this navigation system can be connected to your cellular phone wirelessly. Using this hands-free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your cellular phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a cellular phone featuring Bluetooth technology on the navigation system.

> For details about the connectivity with the devices featuring Bluetooth wireless technology, refer to the information on our website.

Displaying the Phone Menu

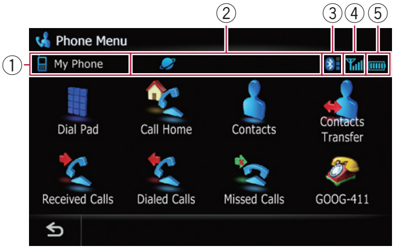
Use the "**Phone Menu**" if you connect the cellular phone to the navigation system for utilization.

➲ For more details of the operation, refer to Chapter 11.

1 Press the HOME button to display the "Top Menu".

2 Touch [Phone].

The "**Phone Menu**" screen appears.



① ▯: Name of connected cellular phone

② ●: Network name of the cellular phone company

③ ▮: Strength of the Bluetooth connection between the navigation system and the device

④ ▮: Reception status of the cellular phone

⑤ ▭: Battery status of the cellular phone ■

Making a phone call

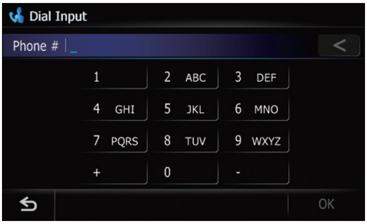
You can make a phone call in many different ways.

Direct dialing

1 Display the "Phone Menu" screen.

2 Touch [Dial Pad].

The direct dial screen appears.



3 Touch the number keys to enter the phone number.

The phone number that was input is displayed.

And then [**OK**] is activated.

- Touch <.

The input number is deleted a digit at a time from the end of the number. Continuing to press this deletes all of the digits.

- Touch ↩.

The screen returns to the previous screen.

4 Touch [OK] to make a call.

❒ To cancel the call after the system starts dialing, touch ☎.

5 Touch ☎ to end the call.

Making a call home easily

You can call home without taking the time to enter the phone number if the phone number has been registered.

1 Display the "Phone Menu" screen.

2 Touch [Call Home].

Dialing home starts.

- ❒ If you have not registered your home number, a message appears. Touch [**Register**] to start registration.
  - ➲ For details, refer to *Registering your home* on page 98.

Calling a number in the "Contacts List"

After finding the entry you want to call in the "**Contacts List**" screen, you can select the number and make the call.

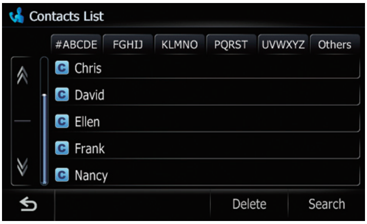
❒ Before using this function, you need to transfer the phone book entries stored in your cellular phone to the navigation system.

➲ For details, refer to *Transferring the phone book* on page 89.

1 Display the "Phone Menu" screen.

2 Touch [Contacts].

The "**Contacts List**" screen appears.



3 Switch the page of the list to display the desired entry.

If you touch an alphabet tab, you can jump to the first page of the contacts whose names start with that letter.

Alphabet tabs

Makes the screen jump to the beginning of the page including the entry whose names start with any of selected letters or numbers.
Touching [**#ABCDE**] also displays the page including the entry whose names start with primary symbols or numbers.
Touching [**Others**] displays the page including entries that are not assigned to any of the other tabs.

4 Touch the desired entry on the list to make a call.

- ❒ If the entry has multiple phone number data, a selection list appears.

■ Touch [**Search**].

The "**Contacts Name Search**" screen appears. You can search by the names registered in the "**Contacts List**" screen.

■ Touch [**Delete**].

The "**Delete from Contacts**" screen appears. If you select the entry you want to delete and touch [**Delete**], a message appears.
If you touch [**OK**], the entry is deleted.

5 Touch ☎ to end the call.

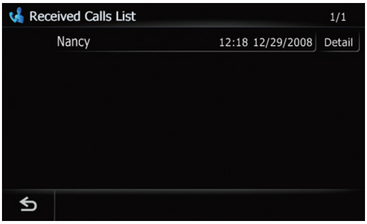
Making a phone call using the received call history

The received call history saves 30 calls per registered cellular phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the "Phone Menu" screen.

2 Touch [Received Calls].

The "**Received Calls List**" screen appears.



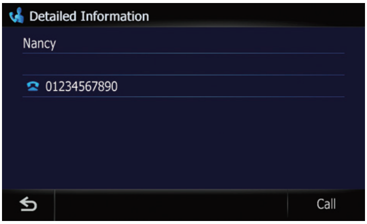
3 Touch an entry on the list.

Dialing starts.

- ❐ To cancel the call after the system starts dialing, touch ☎.

- ■ Touch [**Detail**].

The “**Detailed Information**” screen appears.



Detailed Information

Nancy

01234567890

You can check the details of the party before making a phone call.

4 Touch ☎ to end the call.

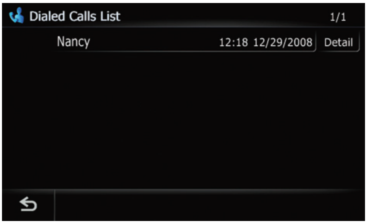
Making a phone call using the dialed number history

The dialed number history saves 30 calls per registered cellular phone. If the entries exceed 30, the oldest one will be deleted.

1 Display the “Phone Menu” screen.

2 Touch [Dialed Calls].

The “**Dialed Calls List**” screen appears.



Dialed Calls List 1/1

Nancy 12:18 12/29/2008

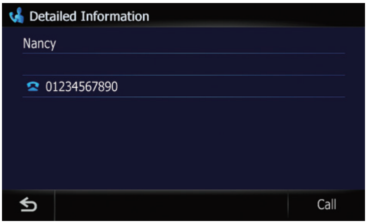
3 Touch an entry on the list.

Dialing starts.

- ❐ To cancel the call after the system starts dialing, touch ☎.

- ■ Touch [**Detail**].

The “**Detailed Information**” screen appears.



Detailed Information

Nancy

01234567890

You can check the details of the party before making a phone call.

4 Touch ☎ to end the call.

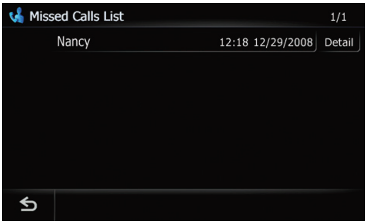
Making a phone call using missed call history

The missed call history saves 30 calls per registered cellular phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the “Phone Menu” screen.

2 Touch [Missed Calls].

The “**Missed Calls List**” screen appears.



Missed Calls List 1/1

Nancy 12:18 12/29/2008

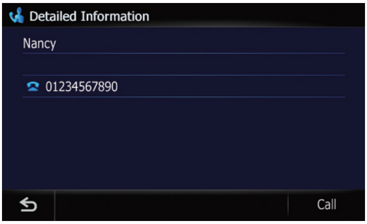
3 Touch an entry on the list.

Dialing starts.

- ❐ To cancel the call after the system starts dialing, touch ☎.

- ■ Touch [**Detail**].

The “**Detailed Information**” screen appears.



Nancy

01234567890

You can check the details of the party before making a phone call.

4 Touch ☎ to end the call.

Dialing GOOG-411

CAUTION

Local and/or long distance charges for making a phone call may apply.

You can dial GOOG-411 to dial the free business listing service of Google™ with one touch.

1 Touch [GOOG-411] on the “Phone Menu”.

- ➲ For details, refer to *Displaying the* **Phone Menu** on page 84.

Dialing GOOG-411 starts.

2 You can now use the GOOG-411 phone service.

For details about GOOG-411 service and availability, contact Google.

Dialing the entry in the “Favorites”

You can make a call to the entry registered in the “**Favorites**”.

1 Display the “Destination Menu” screen.

2 Touch [Favorites].

The “**Favorites**” screen appears.

3 Touch 🔧 next to the location that you want to make a call.

The “**Edit Favorite**” screen appears.

4 Touch [Call] to make a call.

To cancel the call after the system starts dialing, touch ☎.

5 Touch ☎ to end the call.

Dialing a facility’s phone number

You can make a call to facilities with phone number data.

❐ You cannot make a call to locations or POIs that have no phone number data.

1 Display the “Destination Menu” screen.

2 Touch [POI].

The “**POI Search**” screen appears.

3 Search for the POI.

The “**POI List**” screen appears.

- ➲ For details concerning operations, refer to *Searching for Points of Interest (POI)* on page 60.

4 Touch ▤ next to the POI that you want to call.

The “**Detailed POI Information**” screen appears.

5 Touch [Call] to make a call.

To cancel the call after the system starts dialing, touch ☎.

6 Touch ☎ to end the call.

Dialing from the map

You can make a call by selecting the icon of a registered location or a POI icon from the map screen.

❐ You cannot make a call to locations or POIs that have no phone number data.

1 Scroll the map, and place the cursor on an icon on the map.

2 Touch ▤.

The “**Detailed POI Information**” screen appears.

3 Touch [Call] to make a call.

To cancel the call after the system starts dialing, touch ☎.

4 Touch ☎ to end the call. ■

Receiving a phone call

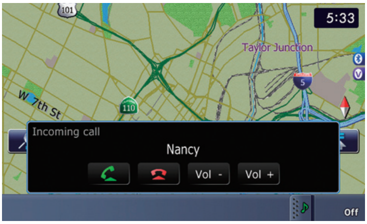
You can perform hands-free answering by using the navigation system.

Answering an incoming call

The system informs you that it is receiving a call by displaying a message and producing a ring sound.
If [**Auto Answer Preference**] is set to [**Off**], answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.

- ❒ You can set this navigation system to automatically answer incoming calls.
  - ➲ For details, refer to *Answering a call automatically* on page 90.

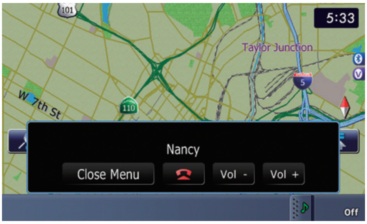
1 When a call comes in, the answering operation menu appears on the screen.



- ❒ The registered name appears if the phone number of the received call is already registered in “**Contacts**”.
- ❒ Depending on the caller ID service, the phone number of the received call may not be displayed. “**Unknown**” appears instead.

2 To answer an incoming call, touch ☎.

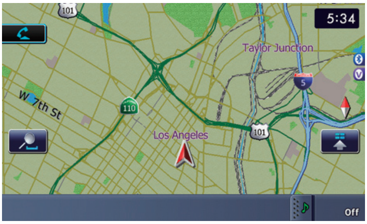
The operation menu during a call appears.



- Touch [**Vol –**] or [**Vol +**].

You can adjust volume when you are talking.

- Touch ☎ to reject an incoming call.
- If you touch [**Close Menu**], the menu is closed and ☎ appears.



To display the menu again, touch ☎.

3 Touch ☎ to end the call.

The call ends.

- ❒ If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
  - ➲ For more details about “**Volume**”, refer to *Setting the Volume for Guidance and Phone* on page 100.
- ❒ You may hear a noise when you hang up the phone.

Rejecting an incoming call

You can reject an incoming call.

➲ For details, refer to *Setting the automatic rejection function* on page 91.

● When a call comes in, touch ☎.

The call is rejected.

- ❒ The rejected call is recorded in the missed call history list.
  - ➲ For details, refer to *Making a phone call using missed call history* on page 86. ■

Transferring the phone book

You can transfer the phone book entries from your cellular phone to the phone book of navigation system.

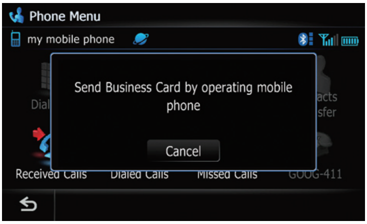
- Depending on the cellular phone, “Phone Book” may be called a name such as “Contacts”, “Business card” or something else.
- With some cellular phones, it may not be possible to transfer the entire phone book at once. In this case, transfer addresses one at a time from your phone book using your cellular phone.
- A maximum of 1 000 entries can be transferred per cellular phone. If the entries exceed 1 000, the extra entries will not be transferred. If more than one number is registered for one person, such as work place and home, each number may be counted separately.
- Each entry can hold up to 5 phone numbers.
- Depending on the cellular phone that is connected to this navigation system via Bluetooth technology, this navigation system may not be able to display the phone book correctly. (Some characters may be garbled.)
- If the phone book in the cellular phone contains image data, the phone book may not be correctly transferred.
- The transferred data cannot be edited on the navigation system.

1 Connect the cellular phone that has the phone book to transfer.

➲ For details, refer to *Connecting a registered Bluetooth device* on page 82.

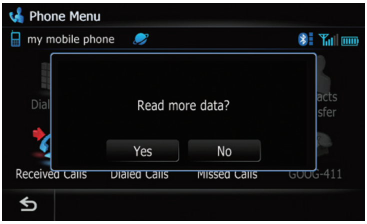
2 Touch [Contacts Transfer] on the “Phone Menu” screen.

3 Check that the following screen is displayed, and operate your cellular phone to transfer the phone book entries.



Send Business Card by operating mobile phone

After transferring the data is finished, a message asking whether you want to transfer more data appears.



Read more data?

4 Touch [No].

The transferred data is imported to the navigation system.

When the data is successfully imported, an import complete message is displayed and the “**Contacts List**” screen appears.

- It may take time depending on how many entries will be transferred.

- Touch [**Yes**].

Repeat the steps to transfer more data. ■

Changing the phone settings

To set the “**Bluetooth Settings**”, display the “**Bluetooth Settings**” screen.

1 Press the HOME button to display the “Top Menu”.

2 Touch [Settings].

The “**Settings Menu**” screen appears.

3 Touch [Bluetooth Settings].

The “**Bluetooth Settings**” screen appears.

Editing the device name

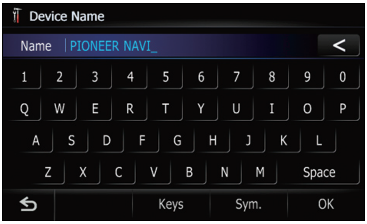
You can change the device name to be displayed on your cellular phone. (Default is [**PIONEER NAVI**].)

1 Display the “Bluetooth Settings” screen.

2 Touch [Device Name].

The keyboard to enter the name appears.

3 Touch < to delete the current name, and enter the new name by using the keyboard.



Device Name

Name PIONEER NAVI_

4 Touch [OK].

The name is changed.

- ❒ Up to 16 characters can be entered for a device name.

Editing the password

You can change the password to be used for authentication on your cellular phone. (Default is [**1111**].)

- ❒ Four to eight characters can be entered for a password.

1 Display the “Bluetooth Settings” screen.

2 Touch [Password].

The “**Set Password**” screen appears.

3 Touch any key to enter the password you want to set and then touch [OK].

Stopping Bluetooth wave transmission

You can stop transmission of electric waves by turning off the Bluetooth function. If you do not use the Bluetooth wireless technology, we recommend selecting [**Off**].

1 Display the “Bluetooth Settings” screen.

2 Touch [Bluetooth On/Off].

Touching [**Bluetooth On/Off**] switches between “**On**” and “**Off**”.

Echo canceling and noise reduction

When you are operating hands-free phoning in the vehicle, you may hear an undesirable echo. This function reduces the echo and noise while you are using hands-free phoning, and maintains a certain sound quality.

1 Display the “Bluetooth Settings” screen.

2 Touch [Echo Cancel].

Touching [**Echo Cancel**] switches between “**On**” and “**Off**”.

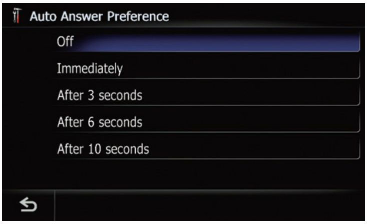
Answering a call automatically

The navigation system automatically answers incoming calls to the cellular phone, so you can answer a call while driving without taking your hands off the steering wheel.

1 Display the “Bluetooth Settings” screen.

2 Touch [Auto Answer Preference].

The “**Auto Answer Preference**” screen appears.



3 Touch the desired option.

- [**Off**]: No automatic response. Respond manually
- [**Immediately**]: Answers immediately
- [**After 3 seconds**]: Answers after three seconds
- [**After 6 seconds**]: Answers after six seconds
- [**After 10 seconds**]: Answers after ten seconds

Setting the automatic rejection function

If this function is on, the navigation system automatically rejects all incoming calls.

1 Display the “Bluetooth Settings” screen.

2 Touch [Refuse All Calls].

Touching [**Refuse All Calls**] switches between “**On**” and “**Off**”.

- ❒ If both “**Refuse All Calls**” and “**Auto Answer Preference**” are activated, “**Refuse All Calls**” takes priority and all incoming calls are automatically rejected.
- ❒ If “**Refuse All Calls**” is set to [**On**], rejected incoming calls will not be stored in the missed call list.

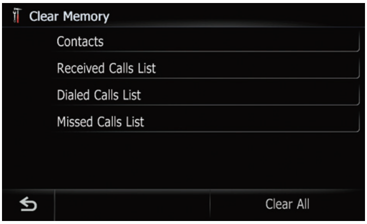
Clearing memory

You can clear the memory of each item that corresponds to the connected cellular phone: phone book, dialed/received/missed call history list and preset dials.

1 Display the “Bluetooth Settings” screen.

2 Touch [Clear Memory].

The “**Clear Memory**” screen appears.



On this screen, you can select the following items:

- **Contacts**:
  You can clear the registered phone book.
- **Received Calls List**:
  You can clear the received call history list.
- **Dialed Calls List**:
  You can clear the dialed call history list.
- **Missed Calls List**:
  You can clear the missed call history list.

▪ Touch [**Clear All**].

It clears all the data that correspond to the connected cellular phone.

3 Touch [Yes].

Data on the selected item is cleared from this navigation system’s memory.

- ❒ If you do not want to clear the memory that you have selected, touch [**No**].

Updating the Bluetooth wireless technology software

Update files will be available for download in the future. You will be able to download the latest update from an appropriate website to your PC.

- ❒ Before you download the files and install the update, read through the instructions on the website. Follow the instructions on the website for steps until [**Firmware update**] becomes active.

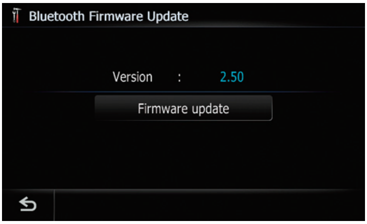
1 Insert an SD memory card into the SD card slot.

- ➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the “Bluetooth Settings” screen.

3 Touch [Firmware update].

The current version is displayed.



4 Touch [Firmware update].

Update starts. ■

Notes for hands-free phoning

General notes

- Connection to all cellular phones featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this navigation system and your cellular phone must be 10 meters or less when sending and receiving voice and data via Bluetooth technology. However, the actual transmission distance may be shorter than the estimated distance, depending on the usage environment.
- With some cellular phones, the ring sound may not be output from the speakers.
- If private mode is selected on the cellular phone, hands-free phoning may be disabled.

Registration and connection

- Cellular phone operations vary depending on the type of cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.
- With cellular phones, phone book transfer may not work even though your phone is paired with the navigation system. In that case, disconnect your phone, perform pairing again from your phone to the navigation system, and then perform the phone book transfer.

Making and receiving calls

- You may hear a noise in the following situations:
  - — When you answer the phone by using the button on the phone.
  - — When the person on the other end of line hangs up the phone.
- If the person on the other end of the phone call cannot hear the conversation due to an echo, decrease the volume level for hands-free phoning. This may reduce the echo.
- With some cellular phones, even if you press the accept button on the cellular phone when a call comes in, hands-free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, the name that comes first in the phone book is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

The received call history and the dialed number history

- Calls made or editing performed only on your cellular phone will not be reflected to the dialed number history or phone book in the navigation system.
- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your cellular phone, no history data will be recorded in the navigation system.

Phone book transfers

- If there are more than 1 000 phone book entries on your cellular phone, all entries may not be downloaded completely.
- With some cellular phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer items one by one from your cellular phone.
- Depending on the cellular phone, this navigation system may not display the phone book correctly. (Some characters may be garbled, or first and last names may be reversed.)
- If the phone book in the cellular phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the cellular phone.)
- Depending on the cellular phone, phone book transfer may not be available. ■

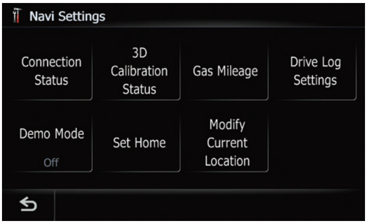
The options in the "Navi Settings" menu

Displaying the "Navi Settings" screen

1 Press the HOME button to display the "Top Menu".

2 Touch [Settings].
The "**Settings Menu**" screen appears.

3 Touch [Navi Settings].
The "**Navi Settings**" menu appears.

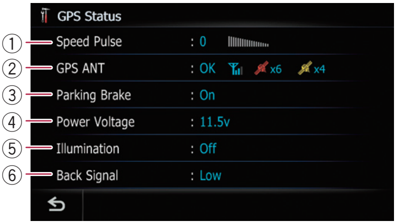


Checking the connections of leads

Check that leads are properly connected between the navigation system and the vehicle. Please also check whether they are connected in the correct positions.

1 Display the "Navi Settings" screen.

2 Touch [Connection Status].
The "**GPS Status**" screen appears.



Speed Pulse : 0
GPS ANT : OK x6 x4
Parking Brake : On
Power Voltage : 11.5v
Illumination : Off
Back Signal : Low

① **Speed Pulse**
The Speed Pulse value detected by the navigation system is shown. "0" is shown while the vehicle is stationary.

② **GPS ANT**
Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received.

Color	Signal communication	Used in positioning
Orange	Yes	Yes
Yellow	Yes	No

❐ When the GPS antenna is connected to this navigation system, [**OK**] is displayed.
When the GPS antenna is not connected to this navigation system, [**NOK**] is displayed.

❐ If reception is poor, please change the installation position of the GPS antenna.

③ **Parking Brake**
When the parking brake is applied, [**On**] is displayed. When the parking brake is released, [**Off**] is displayed.

④ **Power Voltage**
The power voltage (reference value) provided from the vehicle battery to the navigation system is shown. If the voltage goes out of the range from 11 V to 15 V, check that power cable connection is correct.

⑤ **Illumination**
When the headlights or small lamps of a vehicle are on, [**On**] is displayed. When the small lamps of a vehicle are off, [**Off**] is displayed. (If the orange/white lead is not connected, [**Off**] appears.)

⑥ **Back Signal**
When the gear lever is shifted to "**R**", the signal switches to [**High**] or [**Low**]. (One of these is displayed depending on the vehicle.)

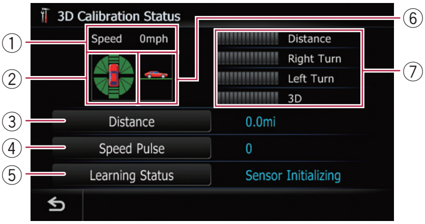
Checking sensor learning status and driving status

❐ The navigation system can automatically use its sensor memory based on the outer dimensions of the tires.

1 Display the "Navi Settings" screen.

2 Touch [3D Calibration Status].

The "**3D Calibration Status**" screen appears.


3D Calibration Status
Speed 0mph
Distance
Right Turn
Left Turn
3D
Distance 0.0mi
Speed Pulse 0
Learning Status Sensor Initializing
①
②
③
④
⑤
⑥
⑦

① **Speed**
The speed detected by the navigation system is indicated. (This indication may be different from the actual speed of your vehicle, so please do not use this instead of the speedometer.)

② **Acceleration or deceleration/Rotational speed**
Acceleration or deceleration velocity of your vehicle is indicated. Also, rotational speed when your vehicle turns to left or right is shown.

③ **Distance**
Driving distance is indicated.

④ **Speed Pulse**
Total number of speed pulses is indicated.

⑤ **Learning Status**
Current driving mode is indicated.

⑥ **Inclination**
Degree of slope of the street that you are currently running is indicated.

⑦ **Degree of learning**
Sensor learning situations for distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**) and 3D detection (**3D**) are indicated by the length of bars.

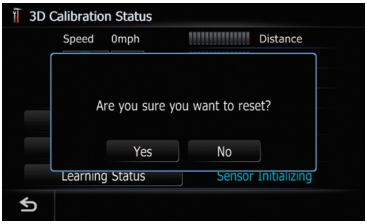
- ❐ When tires have been changed or chains fitted, turning on the Speed Pulse allows the system to detect the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.
- ❐ If ND-PG1 is connected, the distance calculation value cannot be replaced automatically.

Clearing status

You can delete the learned results stored in [**Distance**], [**Speed Pulse**] or [**Learning Status**].

1 Touch [Distance] or [Speed Pulse].

The following message appears.

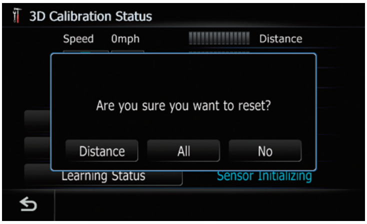

Are you sure you want to reset?
3D Calibration Status
Speed 0mph
Distance
Yes
No
Learning Status
Sensor Initializing

2 Touch [Yes].

Clears the results stored in [**Distance**] or [**Speed Pulse**].

3 Touch [Learning Status].

The following message appears.


Are you sure you want to reset?
3D Calibration Status
Speed 0mph
Distance
Distance
All
No
Learning Status
Sensor Initializing

4 Touch [All].

Clears all learning statuses.

- ❐ Touch [**All**] for the following cases:
  - — After changing the installation position of the navigation system
  - — After changing the installation angle of the navigation system
  - — After moving the navigation system to another vehicle

- ■ Touch [**Distance**].

Clears the learned results stored in [**Distance**].

- ❐ When the distance accuracy is low, touch [**Distance**].

Using the “Gas Mileage” function

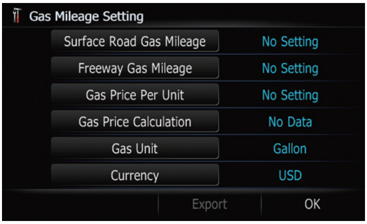
Inputting the fuel consumption information for calculating the fuel cost

You can estimate the fuel cost to your destination by entering the fuel consumption information in the navigation system.

1 Display the “Navi Settings” screen.

2 Touch [Gas Mileage].

The “**Gas Mileage Setting**” screen appears.



Gas Mileage Setting

Surface Road Gas Mileage	No Setting
Freeway Gas Mileage	No Setting
Gas Price Per Unit	No Setting
Gas Price Calculation	No Data
Gas Unit	Gallon
Currency	USD

3 Enter the fuel consumption information.

Enter the following items:

- [**Surface Road Gas Mileage**]:
  Enter the fuel cost when you drive on ordinary roads.
  ❐ How the fuel cost is entered depends on the [**Gas Unit**] setting.
  — When [**Gas Unit**] is set to [**Gallon**]. Enter how many miles (kilometers) you get to a gallon.
  — When [**Gas Unit**] is set to [**Liter**]. Enter how much fuel you need to travel 60 miles (100 kilometers).
- [**Freeway Gas Mileage**]:
  Enter the fuel cost when you drive on the freeway.
  ❐ How the fuel cost is entered depends on the [**Gas Unit**] setting.
  — When [**Gas Unit**] is set to [**Gallon**]. Enter how many miles (kilometers) you get to a gallon.
  — When [**Gas Unit**] is set to [**Liter**]. Enter how much fuel you need to travel 60 miles (100 kilometers).
- [**Gas Price Per Unit**]:
  Enter the fuel unit price.
- [**Gas Unit**]:
  Set the fuel unit.
- [**Currency**]:
  Set the unit of currency.

When all the items are entered, inputting the fuel consumption information is complete.

Entering the fueling information

When you enter the fueling information to the navigation system, and export the data to SD memory cards, you can check the fuel consumption information by using the utility program “AVIC FEEDS” which is available separately, on your PC.

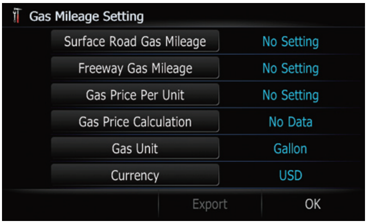
❐ Up to 24 sets of “**Gas Price Calculation**” entries can be stored. You can also export the data, as described below.
If the entries reach the maximum number, a new entry will overwrite the oldest one.

Gas Mileage Management function only assists you to calculate your average mileage based on the information you input. The function does not receive data directly from the vehicle.

1 Display the “Navi Settings” screen.

2 Touch [Gas Mileage].

The “**Gas Mileage Setting**” screen appears.

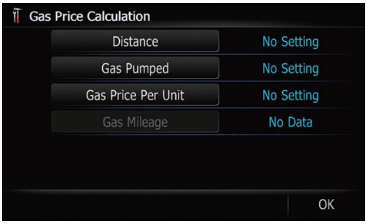


Gas Mileage Setting

Surface Road Gas Mileage	No Setting
Freeway Gas Mileage	No Setting
Gas Price Per Unit	No Setting
Gas Price Calculation	No Data
Gas Unit	Gallon
Currency	USD

3 Touch [Gas Price Calculation].

The “**Gas Price Calculation**” screen appears.



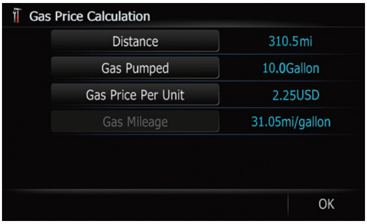
Gas Price Calculation

Distance	No Setting
Gas Pumped	No Setting
Gas Price Per Unit	No Setting
Gas Mileage	No Data

4 Enter the following settings:

- [**Distance**]:
  Enter the distance traveled since the previous fueling.
  - ❒ The distance is entered automatically only when the distance traveled since the previous fueling is recorded.
- [**Gas Pumped**]:
  Enter the amount of fuel pumped.
- [**Gas Price Per Unit**]:
  Enter the fuel unit price.

When all the items are entered, the fuel consumption is displayed next to "**Gas Mileage**".



Gas Price Calculation

Distance	310.5mi
Gas Pumped	10.0Gallon
Gas Price Per Unit	2.25USD
Gas Mileage	31.05mi/gallon

5 Touch [OK].

The "**Gas Mileage Setting**" screen appears.

Exporting the data of "Gas Mileage Management"

Exporting the "**Gas Mileage Management**" data to an SD memory card is possible.

❒ The data stored in this navigation system will be cleared as exporting it to the SD memory card.

❒ If there is previous data in the SD memory card, the data is overwritten with new data when current data is exported.

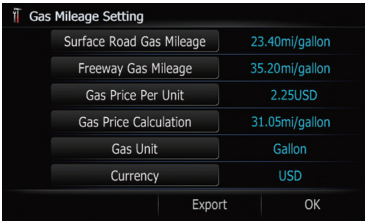
1 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the "Navi Settings" screen.

3 Touch [Gas Mileage].

The "**Gas Mileage Setting**" screen appears.



Gas Mileage Setting

Surface Road Gas Mileage	23.40mi/gallon
Freeway Gas Mileage	35.20mi/gallon
Gas Price Per Unit	2.25USD
Gas Price Calculation	31.05mi/gallon
Gas Unit	Gallon
Currency	USD

4 Touch [Export].

After a message confirming whether to export the data appeared, exporting the data to the SD memory card starts.

The "**Gas Mileage Setting**" screen appears when it is done.

Recording your travel history

Activating the track logger enables you to record your driving history (called "track log" below). You can review the travel history later.

❒ If an SD memory card is inserted into the SD card slot, the track logs will be stored in the SD memory card.

1 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Display the "Navi Settings" screen.

3 Touch [Drive Log Settings].

The "**Drive Log Settings**" screen appears.

4 Touch [Drive Log Settings].

Each time you touch the key changes that setting.

- [**On**]:
  You can export your track log to the SD memory card.
- [**Off**] (default):
  You cannot export your track log to the SD memory card.

▪ Touch [**Type**].

Each time you touch the key changes that setting.

- [**Private**] (default):
  Set the track log attribute to "**Private**".
- [**Business**]:
  Set the track log attribute to "**Business**".
- [**Other**]:
  Set the track log attribute to "**Other**".

❒ While the setting is [**On**], the navigation system continues to store the track logs in the inserted SD memory card.

Using the demonstration guidance

This is a demonstration function for retail stores. After a route is set, touching this key starts the simulation of route guidance.

1 Display the "Navi Settings" screen.

2 Touch [Demo Mode].

Each time you touch the key changes that setting.

- [**On**]:
  Repeat demo drive.
- [**Off**] (default):
  Demo Mode is set off.

3 Display the map screen.

The demonstration guidance will begin.

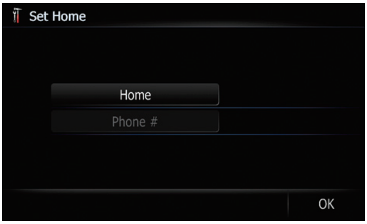
Registering your home

Registering your home position saves time and effort. Also, routes to home positions can be calculated easily with a single touch of the key from the "**Destination Menu**". The registered home position can also be modified later.

1 Display the "Navi Settings" screen.

2 Touch [Set Home].

The "**Set Home**" screen appears.



3 Touch [Home].

The "**Select Search method**" screen appears.

▪ Touch [**Phone #**].

When you have already registered your home, you can edit your home number.

4 Search for a location.

After searching for a point, display it on a map, then touch [**OK**].

The location is registered, and then the "**Set Home**" screen appears.

➲ For details, refer to Chapter 8.

5 Touch [OK].

The registration is completed.

Correcting the current location

Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

1 Display the "Navi Settings" screen.

2 Touch [Modify Current Location].

3 Scroll to the position where you want to set, then touch [OK]. ▣

Options on the "System Settings" menu

Displaying the "System Settings" screen

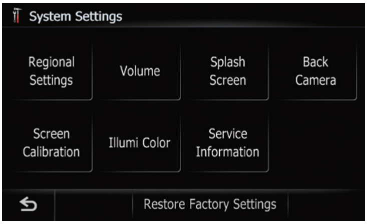
1 Press the HOME button to display the "Top Menu".

2 Touch [Settings].

The “**Settings Menu**” screen appears.

3 Touch [System Settings].

The “**System Settings**” screen appears.

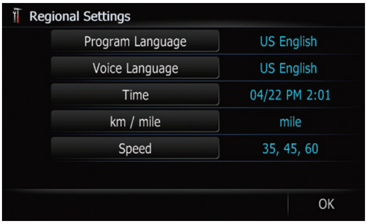


Customizing the regional settings

1 Display the “System Settings” screen.

2 Touch [Regional Settings].

The “**Regional Settings**” screen appears.



Program Language	US English
Voice Language	US English
Time	04/22 PM 2:01
km / mile	mile
Speed	35, 45, 60

Selecting the language

You can set the languages used on the program and voice guidance. Each language can be set separately.

1 Display the “Regional Settings” screen.

2 Touch [Program Language].

The language list is displayed.

3 Touch the desired language.

After the language is selected, the screen returns to the previous screen.

4 Touch [Voice Language].

The “**Voice Language Selection**” screen appears.

5 Touch the desired language.

After the language is selected, the screen returns to the previous screen.

6 Touch [OK] on the “Regional Settings” screen.

A message confirming whether to restart the navigation system appears.

7 Touch [OK].

The navigation system restarts.

- Press the **MODE** button or the **HOME** button.

Cancels the setting of the languages.

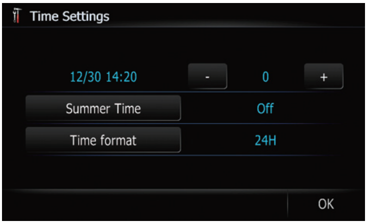
Setting the time difference

Adjusts the system’s clock. Set the time difference (**+**, **–**) from the time originally set in your navigation system.

1 Display the “Regional Settings” screen.

2 Touch [Time].

The “**Time Settings**” screen appears.



12/30 14:20 0

Summer Time	Off
Time format	24H

3 To set the time difference, touch [+] or [–].

The time difference between the time originally set in the navigation system (Pacific Standard Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching [**+**] or [**–**] changes the time difference display in one-hour increments.

The time difference can be set from **–4** to **+9** hours.

4 Touch [Summer Time].

If necessary, set to summer time.

Summer time setting is off by default. Touch [**Summer Time**] to change the setting if you are in the summer time period.

5 Touch [Time format].

Each time you touch the key changes that setting.

- [**12H**] (default):
  Changes the display to 12-hour format with am/pm.
- [**24H**]:
  Changes the display to 24-hour format.

Changing the unit between km and miles

This setting controls the unit of distance and speed displayed on your navigation system.

1 Display the "Regional Settings" screen.

2 Touch [km / mile].

A message confirming whether to change the setting appears.

3 Touch [Yes].

It changes the settings as follows:

- [**mile**] (default):
  Show distance in miles.
- [**Mile&Yard**]:
  Show distance in miles and yards.
- [**km**]:
  Show distance in kilometers.

■ Touch [**No**].

Cancels the setting.

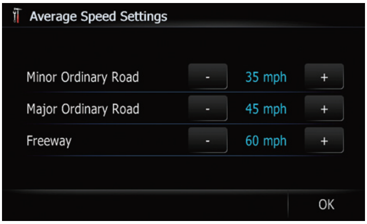
Changing the virtual speed of the vehicle

When calculating the expected time of arrival and the travel time to the destination, set the average speed for the freeway or ordinary roads using [**+**] and [**–**].

1 Display the "Regional Settings" screen.

2 Touch [Speed].

The "**Average Speed Settings**" screen appears.



Minor Ordinary Road 35 mph
Major Ordinary Road 45 mph
Freeway 60 mph

3 Touch [+] or [–] to set the speed.

❒ The estimated time of arrival is not necessarily estimated based on this speed value.

4 Touch [OK].

The settings are completed.

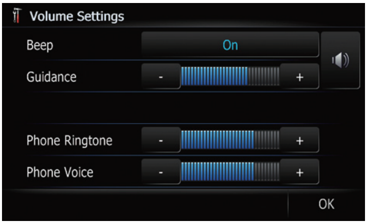
Setting the Volume for Guidance and Phone

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and the beep sound.

1 Display the "System Settings" screen.

2 Touch [Volume].

The "**Volume Settings**" screen appears.



Beep On

3 Touch the key next to "Beep".

Each time you touch the key changes that setting.

- [**On**] (default):
  A beep sounds.
- [**Off**]:
  The beep sound is muted.

4 Touch [+] or [–] to set their volume.

On this screen, you can operate the following items.

- [**Guidance**]

This setting controls the guidance volume of navigation.

❐ When set to 🔊, guidance is output. When set to 🔇, no guidance is output.

- [**Phone Ringtone**]
  This setting controls the incoming ring tone volume.
- [**Phone Voice**]
  This setting controls the incoming voice volume.

❐ **Phone Ringtone** and **Phone Voice** adjustments are related to the cellular phone featuring Bluetooth technology. No adjustment is needed when the cellular phone featuring Bluetooth technology is not connected.

❐ Volume of the AV source is adjusted by the **VOL** (**+**/**–**) button.

➲ For details, refer to *Checking part names and functions* on page 29.

5 To finish the setting, touch [OK].

Changing the splash screen

You can change the splash screen to the other images stored in the navigation system.

1 Display the “System Settings” screen.

2 Touch [Splash Screen].
The “**Select Splash Screen**” screen appears.

3 Touch the image to use as the splash screen from the list.
The image is displayed on the screen.

4 Touch [OK].
The image is set as the splash screen, and the “**System Settings**” screen returns.

Changing to the splash screen stored in the SD memory card

You can change the splash screen that appears when the navigation system starts. Copy your chosen image to the SD memory card, and select the image to import.

❐ Splash screen images should be used within the following formats;
— BMP or JPEG files
— Allowable horizontal and vertical size are 2 592 pixels x 1 944 pixels or smaller
— Allowable data size is 6 MB or smaller

❐ Proper compatibility with allowable files is not guaranteed.

❐ Imported original images will be stored in the built-in memory, but the ability to save these images cannot be guaranteed completely. If your original image data is deleted, insert the SD memory card again and re-import the original image.

1 Create a folder named “Pictures” on the top-most directory of the SD memory card and store the picture files in this folder.

2 Store the picture files in “Pictures”.

3 Insert an SD memory card into the SD card slot.

➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

4 Display the “System Settings” screen.

5 Touch [Splash Screen].
The “**Select Splash Screen**” screen appears.

6 Touch [Select from SD].
The “**Select Splash Screen**” screen appears.

7 Touch the image to use as the splash screen from the list.
The image is displayed on the screen.

8 Touch [OK].
The image is set as the splash screen, and the “**System Settings**” screen returns.

Setting for rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC2). (For details, consult your dealer.)

Rear view camera

The navigation system features a function that automatically switches to the full-screen rear view camera image installed on your vehicle. When the shift lever is in the REVERSE (R) position, the screen automatically switches to full-screen rear view camera.

Camera for Rear view mode

[**Rear View**] can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please be aware that with this setting, camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable.

⚠ CAUTION

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.

- ❒ Immediately verify whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
- ❒ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting in [**Polarity**].

1 Display the “System Settings” screen.

2 Touch [Back Camera].

The “**Back Camera Settings**” screen appears.

3 Touch [Camera] to turn it [On].

- ❒ You can only switch to “**Rear View**” if this setting is [**On**].

4 Touch [Battery] or [GND] next to “Polarity” to select the appropriate polarity setting.

- **Battery** — When the polarity of the connected lead is positive while the shift lever is in the REVERSE (R) position
- **GND** — When the polarity of the connected lead is negative while the shift lever is in the REVERSE (R) position

Adjusting the response positions of the touch panel (touch panel calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel screen.

- ❒ Do not use a sharp pointed tool such as a ballpoint pen or a mechanical pen, which could damage the screen.

1 Display the “System Settings” screen.

2 Touch [Screen Calibration].

A message confirming whether to start the calibration appears.

3 Gently touch the center of + mark displayed on the screen.

The target indicates the order.

After you touch all marks, the adjusted position data is saved.

- ❒ Do not turn off the engine while saving the adjusted position data.

- ■ Press the **MODE** button.

Returns to the previous adjustment position.

- ■ Press and hold the **MODE** button.

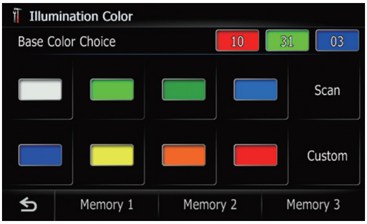
Cancels the adjustment.

Setting the illumination color

The illumination color can be selected from 11 different colors. Furthermore, the illumination color can be switched between these 11 colors in order.
To set the illumination color, display the "**Illumination Color**" screen.

1 Display the "System Settings" screen.

2 Touch [Illumi Color].
The "**Illumination Color**" screen appears.



Selecting the color from the preset colors

1 Display the "Illumination Color" screen.

2 Touch the color you want.
Available options:

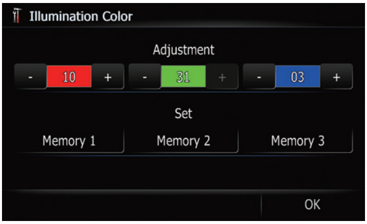
- Colored keys — Selects the desired preset color
- **Memory 1**/**Memory 2**/**Memory 3** — Colors registered in the memory
  - ➲ For details, refer to *Creating a user-defined color and storing it to memory* on this page.
- **Scan** — Shifts between the eight default colors in sequence gradually.

Creating a user-defined color and storing it to memory

You can create a user-defined color and set it as the illumination color.

1 Display the "Illumination Color" screen.

2 Touch [Custom].
The "**Illumination Color**" screen appears.



❒ If [**Scan**] is set, [**Custom**] cannot be selected.

3 Touch [+] or [–] to adjust the values for Red, Green and Blue to create a favorite color.
Watch the illumination of hardware keys while adjusting the color.
Each time you touch [**+**] or [**–**] increases or decreases the value of the selected item. **+31** to **+00** is displayed as the value is increased or decreased.

❒ An entry cannot be stored with all of the values set to "**+00**".

4 Touch [Memory 1], [Memory 2] or [Memory 3] to store the illumination color.

5 Touch [OK] to return to the previous screen.

Checking the version information

1 Display the "System Settings" screen.

2 Touch [Service Information].
The "**Service Information Screen**" screen appears.

3 Check the version information. ■

Replicating the settings

You can import settings you have made on the utility program "AVIC FEEDS" which is available separately to the navigation system.

1 Insert an SD memory card into the SD card slot.

- ➲ For more details of the operation, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Press the HOME button to display the "Top Menu".

3 Touch [Settings].
The "**Settings Menu**" screen appears.

4 Touch [Setting Replicator].
A message confirming whether to update the settings appears.

5 Touch [Yes].
Update starts.
After the settings are updated, a message confirming whether to restart the navigation system appears.

6 Touch [OK].
The navigation system restarts. ▣

Turning off the screen

By turning off the backlight of the LCD screen, you can turn off the screen display without turning off the voice guidance.

1 Display the "System Settings" screen.

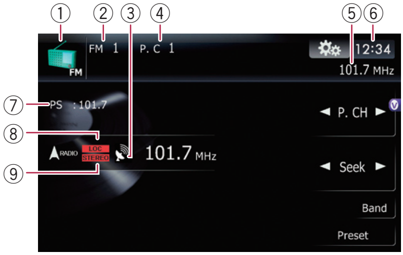
2 Touch [Screen Off].
The screen is turned off.

- ❒ Touch anywhere on the screen to turn it back on. ▣

You can listen to the radio by using the navigation system. This section describes operations for radio (FM).

- **Touch [FM] on the "AV Source" menu to display the "FM" screen.**
  ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

Reading the screen



① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the radio is tuned to: FM1 to FM3.

③ **Signal level indicator**

④ **Preset number indicator**
Shows what preset item has been selected.

⑤ **Frequency indicator**

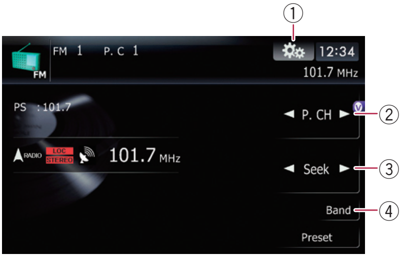
⑥ **Current time**

⑦ **Program service name indicator**
Shows the program service name (station name) of the current station.

⑧ **LOCAL indicator**
Shows when local seek tuning is on.

⑨ **STEREO indicator**
Shows that the frequency selected is being broadcast in stereo. ■

Using the touch panel keys



① **Display the "Function" menu**
➲ For details, refer to *Using the* "**Function**" *menu* on the next page.

② **Select a preset channel**
[◄] or [►] can be used to switch preset channels.

③ **Perform manual tuning**
To tune manually, touch [◄] or [►] briefly. The frequencies move up or down one step at a time.

Perform seek tuning
To perform seek tuning, touch and hold [◄] or [►] for about one second and release. The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

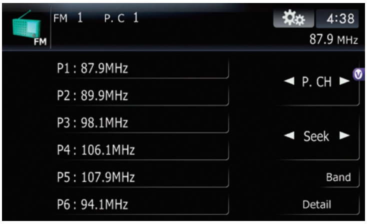
❒ You can cancel seek tuning by touching either [◄] or [►] briefly.
❒ If you touch and hold [◄] or [►], you can skip broadcasting frequencies. Seek tuning will start as soon as you release the keys.
❒ You can also perform these operations by using the **TRK** (◄/►) button.

④ **Select an FM band**
Touch [**Band**] repeatedly until the desired FM band is displayed, **FM1**, **FM2** or **FM3**.

❒ This function is convenient for preparing different preset lists for each band.

Switching between the detailed information display and the preset list display

You can switch the left side of the basic screen according to your preference.

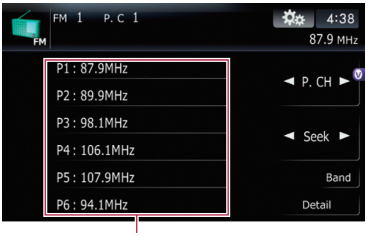

FM 1 P. C 1
4:38
87.9 MHz
FM
P1 : 87.9MHz
P2 : 89.9MHz
P3 : 98.1MHz
P4 : 106.1MHz
P5 : 107.9MHz
P6 : 94.1MHz
◄ P. CH ►
◄ Seek ►
Band
Detail

- **Touch [Preset] or [Detail].**

Each touch of [**Preset**] (or [**Detail**]) changes the detailed information display or preset list display.

Storing and recalling broadcast frequencies

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).


FM 1 P. C 1
4:38
87.9 MHz
FM
P1 : 87.9MHz
P2 : 89.9MHz
P3 : 98.1MHz
P4 : 106.1MHz
P5 : 107.9MHz
P6 : 94.1MHz
◄ P. CH ►
◄ Seek ►
Band
Detail

Preset tuning keys

1 When you find a frequency that you want to store in memory, touch and hold a preset tuning key [P1] to [P6] until the preset number (e.g., P. C 1) appears.

The selected radio station has been stored in memory.

❒ Up to 18 FM stations, six for each of the three FM bands, as well as six AM stations, can be stored in memory.

2 The next time you touch the same preset tuning key [P1] to [P6], the radio station frequencies are recalled from memory.

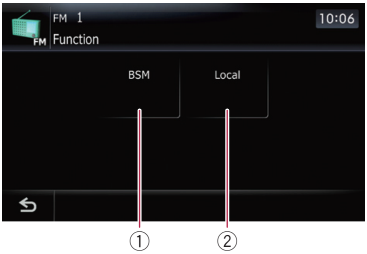
❒ You can also use [◄] and [►] to recall radio stations assigned to preset tuning keys [**P1**] to [**P6**]. ■

Using the “Function” menu

1 Touch [FM] on the “AV Source” menu to display the “FM” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.


FM 1
Function
10:06
FM
BSM
Local
①
②

① **Storing the strongest broadcast frequencies**

➲ For details, refer to this page.

② **Tuning in strong signals**

➲ For details, refer to the next page.

Storing the strongest broadcast frequencies

“**BSM**” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys [**P1**] to [**P6**] and, once stored there, you can tune in to these frequencies with the touch of a key.

1 Touch [BSM].

2 Touch [Start] to start “BSM”.

BSM begins to flash. While **BSM** is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys [**P1**] to [**P6**] in order of their signal strength. When this is complete, **BSM** stops flashing.

- ❐ To cancel the storage process, touch [**Stop**].
- ❐ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have already saved by using [**P1**] to [**P6**].

Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch [Local].

2 Touch [On] to turn local seek tuning on.

To turn local seek tuning off, touch [**Off**].

3 Touch [◄Prev] or [Next►] to set the sensitivity.

There are four levels of sensitivity for FM.

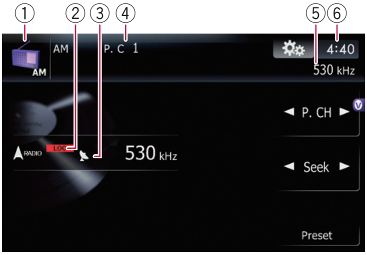
Level: **1** — **2** — **3** — **4**

- ❐ The level “**4**” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ■

You can listen to the radio using this navigation system. This section describes operations for radio (AM).

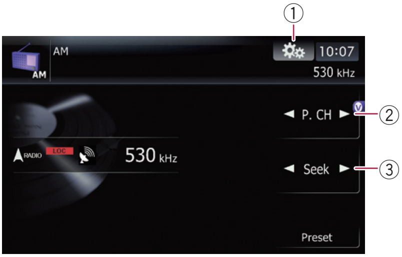
- **Touch [AM] on the “AV Source” menu to display the “AM” screen.**
  ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

Reading the screen



① **Source icon**
Shows which source has been selected.
② **LOCAL indicator**
Shows when local seek tuning is on.
③ **Signal level indicator**
④ **Preset number indicator**
Shows what preset item has been selected.
⑤ **Frequency indicator**
⑥ **Current time** ■

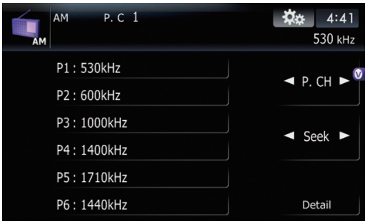
Using the touch panel keys



① **Display the “Function” menu**
➲ For details, refer to *Using the “**Function**” menu* on the next page.
② **Select a preset channel**
◀ or ▶ can be used to switch presets.
③ **Perform manual tuning**
To tune manually, touch [◀] or [▶] briefly. The frequencies move up or down one step at a time.
Perform seek tuning
To perform seek tuning, touch and hold [◀] or [▶] for about one second and release. The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
❐ You can cancel seek tuning by touching either [◀] or [▶] briefly.
❐ If you touch and hold [◀] or [▶], you can skip broadcasting frequencies. Seek tuning will start as soon as you release the keys.
❐ You can also perform these operations by using the **TRK** (◀/▶) button.

Switching between the detailed information display and the preset list display

You can switch the left side of the basic screen according to your preference.



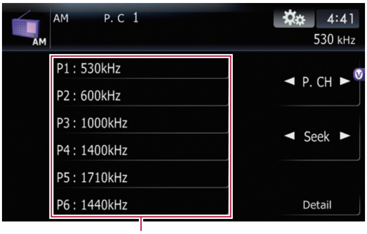
P1 : 530kHz
P2 : 600kHz
P3 : 1000kHz
P4 : 1400kHz
P5 : 1710kHz
P6 : 1440kHz

- **Touch [Preset] (or [Detail]).**

Each touch of [**Preset**] (or [**Detail**]) changes the detailed information display or preset list display.

Storing and recalling broadcast frequencies

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).



Preset tuning keys

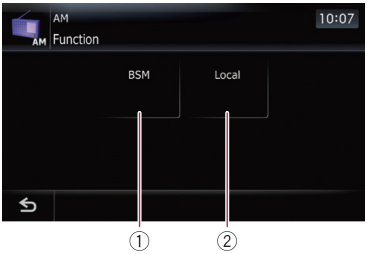
1 When you find a frequency that you want to store in memory, touch and hold a preset tuning key [P1] to [P6] until the preset number (e.g., P. C 1) appears.
The selected radio station has been stored in memory.

2 The next time you touch the same preset tuning key [P1] to [P6], the radio station frequencies are recalled from memory.
- ❒ You can also use [◄] and [►] to recall radio stations assigned to preset tuning keys [**P1**] to [**P6**]. ■

Using the “Function” menu

1 Touch [AM] on the “AV Source” menu to display the “AM” screen.
- ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.



① **Storing the strongest broadcast frequencies**
- ➲ For details, refer to this page.

② **Tuning in strong signals**
- ➲ For details, refer to this page.

Storing the strongest broadcast frequencies

“**BSM**” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys [**P1**] to [**P6**] and, once stored there, you can tune in to these frequencies with the touch of a key.

● **Touch [Start] to turn BSM on.**
BSM begins to flash. While **BSM** is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys [**P1**] to [**P6**] in order of their signal strength. When this is complete, **BSM** stops flashing.
- ❒ To cancel the storage process, touch [**Stop**].
- ❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have already saved by using [**P1**] to [**P6**].

Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch [On] to turn local seek tuning on.
To turn local seek tuning off, touch [**Off**].

2 Touch [◄Prev] or [Next►] to set the sensitivity.
There are two levels of sensitivity for AM.
Level: **1** — **2**
- ❒ The level “**2**” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ■

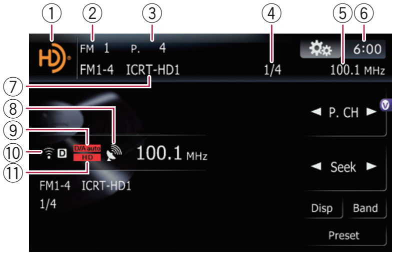
You can listen to the radio by using the navigation system. This section describes operations for HD Radio reception.

❐ For details concerning operation, refer to the HD Radio tuner's operation manual.

● **Touch [Digital Radio] on the "AV Source" menu to display the "Digital Radio" screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

Reading the screen



① **Source icon**
Shows which source has been selected.

② **Band indicator**
Shows which band the radio is tuned to: FM1, FM2, FM3 or AM.

③ **Preset number indicator**
Shows what preset item has been selected.

④ **Multicasting indicator**
Shows the number of multicast channels in the current frequency.

⑤ **Frequency indicator**

⑥ **Current time**

⑦ **Detailed information**
➲ For details, refer to *Switching the display* on the next page.

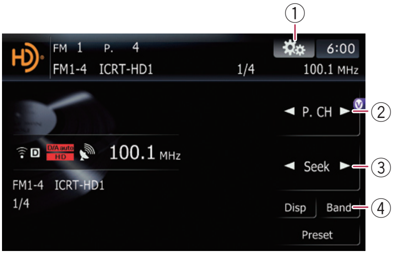
⑧ **Signal level indicator**

⑨ **Blending mode indicator**
➲ For details, refer to *Switching the reception mode* on page 112.

⑩ **Signal type indicator**
Shows the type of signal currently being received. If a digital broadcasting is received, "D" appears. Otherwise, "A" appears.

⑪ **Seek type indicator**
➲ For details, refer to *Switching the seek mode* on page 112. ■

Using the touch panel keys



① **Display the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on the next page.

② **Select a preset channel**
[◀] or [▶] can be used to switch presets channels.

③ **Perform manual tuning**
To tune manually, touch [◀] or [▶] briefly. The frequencies move up or down one step at a time.

Perform seek tuning
To perform seek tuning, touch and hold [◀] or [▶] for about one second and release. The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

❐ You can cancel seek tuning by touching either [◀] or [▶] briefly.

❐ If you touch and hold [◀] or [▶], you can skip broadcasting frequencies. Seek tuning will start as soon as you release the keys.

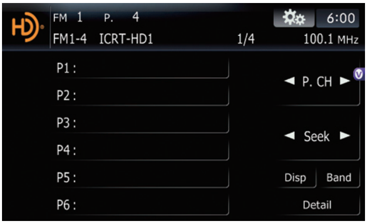
❐ You can also perform these operations by using the **TRK** (◀/▶) button.

④ **Select a band**
Touch [**Band**] repeatedly until the desired band is displayed: **FM1**, **FM2**, **FM3** or **AM**.

❐ This function is convenient for preparing different preset lists for each band.

Switching between the detailed information display and the preset list display

You can switch the left side of the basic screen according to your preference.

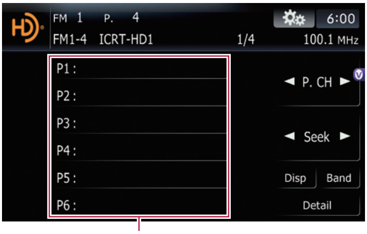

FM 1 P. 4
6:00
FM1-4 ICRT-HD1
1/4
100.1 MHz
P1 :
P2 :
P3 :
P4 :
P5 :
P6 :
◄ P. CH ►
◄ Seek ►
Disp
Band
Detail

● **Touch [Preset] (or [Detail]).**

Each touch of [**Preset**] (or [**Detail**]) changes the detailed information display or preset list display.

Storing and recalling broadcast frequencies

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).


FM 1 P. 4
6:00
FM1-4 ICRT-HD1
1/4
100.1 MHz
P1 :
P2 :
P3 :
P4 :
P5 :
P6 :
◄ P. CH ►
◄ Seek ►
Disp
Band
Detail

Preset tuning keys

1 When you find a frequency that you want to store in memory, touch and hold a preset tuning key [P1] to [P6] until the preset number (e.g., P. C 1) appears.

The selected radio station has been stored in memory.

2 The next time you touch the same preset tuning key [P1] to [P6], the radio station frequencies are recalled from memory.

- ❐ You can also use [◄] and [►] to recall radio stations assigned to preset tuning keys [**P1**] to [**P6**]. ■

Switching the display

Desired information can be displayed.

● **Touch [Disp].**

Touch [**Disp**] repeatedly to switch between the following settings:

Channel name — Artist name — Song title — Program type

- ❐ Only when the tuner has been tuned in to an HD Radio station, can the display be changed.
- ❐ When the tuner has been tuned in to an HD Radio station, default display is changed into station name instead of frequency.

■ Touch and hold [**Disp**].

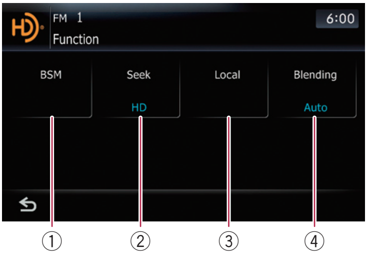
You can turn the detailed information scroll mode on and off. ■

Using the “Function” menu

1 Touch [Digital Radio] on the “AV Source” menu to display the “Digital Radio” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.


FM 1
6:00
Function
BSM
Seek
HD
Local
Blending
Auto
①
②
③
④

① **Storing the strongest broadcast frequencies**

➲ For details, refer to the next page.

② **Switching the seek mode**

➲ For details, refer to this page.

③ **Tuning in strong signals**

➲ For details, refer to this page.

④ **Switching the reception mode**

➲ For details, refer to this page.

Storing the strongest broadcast frequencies

“**BSM**” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys [**P1**] to [**P6**] and, once stored there, you can tune in to these frequencies with the touch of a key.

● **Touch [Start] to turn BSM on.**

BSM begins to flash. While **BSM** is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys [**P1**] to [**P6**] in order of their signal strength. When this is complete, **BSM** stops flashing.

❒ To cancel the storage process, touch [**Stop**].

❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have already saved by using [**P1**] to [**P6**].

Switching the seek mode

You can select the method of seek tuning.

● **Touch [Seek] to select the desired setting.**

- [**All**]:
  Seeks stations from both analog and digital broadcasting.
- [**HD**]:
  Seeks from digital broadcasting only.

❒ If you select “**HD**” on this setting while [**Blending**] is set to “**Analog**”, the setting on [**Blending**] turns to “**D/A Auto**” automatically.

Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch [On] to turn local seek tuning on.

To turn local seek tuning off, touch [**Off**].

2 Touch [◀Prev] or [Next▶] to set the sensitivity.

There are four levels of sensitivity for FM and two levels for AM:

FM: **1** — **2** — **3** — **4**

AM: **1** — **2**

❒ The FM “**4**” (AM “**2**”) setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Switching the reception mode

If a digital broadcast reception condition gets poor, the tuner automatically switches to the analog broadcast of the same frequency level in default. If you want to prevent a frequent automatic switching, switch this setting to [**Analog**].

● **Touch [Blending] to switch the reception mode.**

- [**Analog**]:
  Receives analog broadcasting only.
- [**D/A Auto**]:
  Automatically switches to the analog broadcast of the same frequency level as the digital broadcast.

❒ If you select “**Analog**” on this setting while [**Seek**] is set to “**HD**”, the setting on [**Seek**] turns to “**All**” automatically. ■

Playing audio CDs

You can play a normal music CD using the built-in drive of the navigation system. This section describes how.

1 Insert the disc you want to play into disc-loading slot.

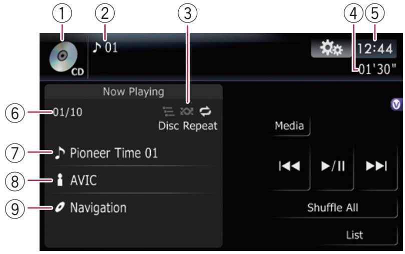
Playback starts from the first track of the CD.

2 Touch [Disc] on the “AV Source” menu to display the “CD” screen.

- ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

3 Use the touch panel keys on the screen to control the disc.

Reading the screen


①
②
③
④
⑤
⑥
⑦
⑧
⑨
CD
♪ 01
12:44
01'30"
Now Playing
01/10
Disc Repeat
Media
Pioneer Time 01
AVIC
Navigation
Shuffle All
List

① **Source icon**
Shows which source has been selected.

② **Track number indicator**
Shows the number of the track currently playing.

③ **Playback condition indicator**
The marks shown below appears and indicates the current playback condition.

☰: Scan play

⤮: Random play

🔁: Repeat play

Indicator	Meaning
Disc Repeat	All tracks in the current disc are played repeatedly. This is the default condition.
Track Repeat	The current track is played repeatedly.
Disc Random	All tracks in the current disc are played in random order.
Disc Scan	The beginning of each track is played for about 10 seconds.

- ➲ For more information, refer to *Using the “***Function***” menu* on the next page.

④ **Play time indicator**
Shows the elapsed playing time within the current track.

⑤ **Current time**

⑥ **Song number indicator**
Shows the track number currently played and the total number of tracks in the current repeat range.

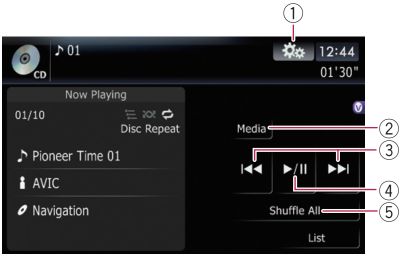
⑦ **Track title indicator**
Shows the title of the track currently playing (when available).

⑧ **Artist name indicator**
Shows the artist name currently playing (when available).

⑨ **Album title indicator**
Shows the title of the album for the current track (when available). ■

Using the touch panel keys

Touch panel keys


①
②
③
④
⑤
CD
♪ 01
12:44
01'30"
Now Playing
01/10
Disc Repeat
Media
Pioneer Time 01
AVIC
Navigation
Shuffle All
List

① **Display the “Function” menu**
- ➲ For details, refer to *Using the “***Function***” menu* on the next page.

② **Switch the media file type played**
- ➲ For details, refer to ***Switch the media file type played*** on page 116.

③ **Skip the track forward or backward**

Touching [▶▶|] skips to the start of the next track. Touching [|◀◀] once skips to the start of the current track. Touching it again will skip to the previous track.

Fast reverse or forward

Touch and hold [|◀◀] or [▶▶|] to fast reverse or fast forward.

❒ Fast reverse stops when it reaches the beginning of the first track on the disc.

❒ You can also perform these operations by using **TRK** (◀/▶) button.

④ **Playback and Pause**

Touching [▶/II] switches between playback and pause.

⑤ **Shuffle All**

All of the songs in the disc can be played at random by touching only one key.

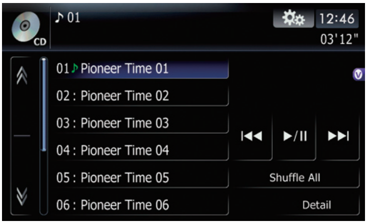
❒ To cancel random play, switch [**Random**] to [**Off**] on the “**Function**” menu. ■

Selecting a track from the list

The list lets you see the list of track titles on a disc and select one of them to play.

1 **Touch [List].**

2 **Touch the track you want to play.**



The track currently playing is highlighted. Touching ∧ or ∨ switches the selection to the next or previous page in the list.

❒ The “–” mark is displayed if there is no corresponding information.

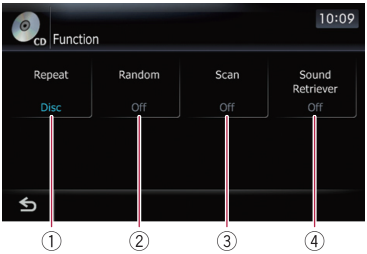
3 **To return to the previous screen, touch [Detail].** ■

Using the “Function” menu

1 **Touch [Disc] on the “AV Source” menu to display the “CD” screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 **Touch ⚙.**



① **Repeating play**

Each touch of [**Repeat**] changes the setting as follows:

- **Disc** — Repeats the current disc
- **Track** — Repeats just the current track

❒ If you perform track search or fast forward or reverse, track repeat playback is automatically canceled.

② **Play tracks in a random order**

Touching [**Random**] switches between [**On**] and [**Off**].

③ **Scan tracks of a CD**

Touching [**Scan**] switches between [**On**] and [**Off**]. Scan play lets you hear the first 10 seconds of each track on the CD. When you find the track you want, touch [**Scan**] to turn scan play off.

❒ After scanning is finished, normal playback of the tracks will begin again.

④ **Uses “Sound Retriever” function**

“**Sound Retriever**” function automatically enhances compressed audio and restores rich sound.

Each touch of [**Sound Retriever**] changes the setting as follows:

- **MODE 1**: Activates “**Sound Retriever**” function.
- **MODE 2**: Activates “**Sound Retriever**” function.
- **Off**: Deactivates “**Sound Retriever**” function.

❒ **MODE 2** is more effective than **MODE 1**. ■

Playing music files on ROM

You can play a disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

❒ In the following description, the MP3, WMA, AAC files are collectively referred to as “Compressed audio file”.

1 Insert the disc you want to play into disc-loading slot.

Playback starts from the first file of the ROM.

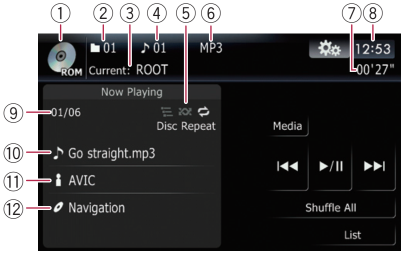
2 Touch [Disc] on the “AV Source” menu to display the “ROM” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

3 Use this ROM screen to play the disc.

➲ For details, refer to *Using the touch panel keys* on the next page.

Reading the screen



① **Source icon**
Shows which source has been selected.

② **Folder number indicator**
Shows the folder number currently playing.

③ **Folder name indicator**
Shows the folder name currently playing.

④ **File indicator**
Shows the file number currently playing.

⑤ **Playback condition indicator**
The marks shown below appears and indicates the current playback condition.

▤: Scan play

⤨: Random play

🔁: Repeat play

Indicator	Meaning
Disc Repeat	All audio files in the disc are played repeatedly. This is the default condition.
Folder Repeat	All audio files in the current folder are played repeatedly.
Track Repeat	The current file is played repeatedly.
Disc Random	All audio files in the current disc are played in random order.
Folder Random	All audio files in the current folder are played in random order.
Disc Scan	The beginning of the first audio files of each folder is played for about 10 seconds.
Folder Scan	The beginning of each file in the current folder is played for about 10 seconds.

➲ For more information, refer to *Using the “***Function***” menu* on the next page.

⑥ **File type indicator**
Shows the type of audio file currently playing.

⑦ **Play time indicator**
Shows the elapsed playing time within the current track.

⑧ **Current time**

⑨ **File number indicator**
Shows the number of the file and the total number of files in the repeat range.

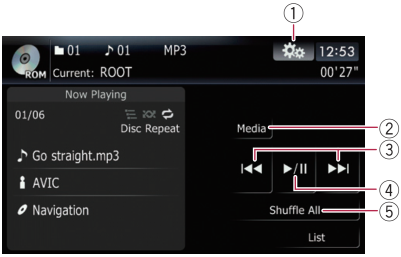
⑩ **Track title indicator**
Shows the title of the track currently playing (when available).

❒ If the title of a track is not available, the file name appears.

⑪ **Artist name indicator**
Shows the artist name currently playing (when available).

⑫ **Album title indicator**
Shows the title of the album for the current track (when available). ■

Using the touch panel keys


①
01
♪01
MP3
12:53
ROM
Current: ROOT
00'27"
Now Playing
01/06
Disc Repeat
♪ Go straight.mp3
AVIC
Navigation
Media
②
③
⏮
▶/II
⏭
④
Shuffle All
⑤
List

① **Display the "Function" menu**

➲ For details, refer to *Using the "***Function***" menu* on this page.

② **Switch the media file type played**

When playing a disc containing a mixture of various media file types, you can switch between media file types to play.

Touch [**Media**] repeatedly to switch between the following media file types:

CD (audio data (CD-DA)) — **ROM** (compressed audio file) — **DivX** (DivX video files)

❐ This touch panel key appears only when playing a disc containing a mixture of various media file types.

③ **Skip the track forward or backward**

Touching [▶▶I] skips to the start of the next track. Touching [I◀◀] once skips to the start of the current track. Touching it again will skip to the previous track.

Fast reverse or forward

Touch and hold [I◀◀] or [▶▶I] to fast reverse or fast forward.

❐ Fast reverse stops when it reaches the beginning of the first file on the repeat range.

❐ In the case of compressed audio files, there is no sound on fast rewind or forward.

❐ You can also perform these operations by using **TRK** (◀/▶) button.

④ **Playback and Pause**

Touching [▶/II] switches between playback and pause.

⑤ **Shuffle All**

All of the songs in the disc can be played at random by touching only one key.

❐ If the disc contains a mixture of various media file types, all tracks within the current part ("CD" or "ROM") are played randomly.

❐ To cancel random play, switch [**Random**] to [**Off**] on the "**Function**" menu.

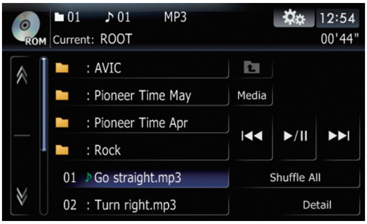
Selecting a track from the list

The list lets you see the list of track titles or folder names on a disc. Touch a folder on the list to view its contents. You can play a track on the list by touching it.

1 Touch [List].

The contents of the folder in which the currently playing file is located are displayed.

2 Touch the folder that you want to view.


01
♪01
MP3
12:54
ROM
Current: ROOT
00'44"
: AVIC
: Pioneer Time May
: Pioneer Time Apr
: Rock
01 ♪Go straight.mp3
02 : Turn right.mp3
Media
⏮
▶/II
⏭
Shuffle All
Detail

The track currently playing is highlighted.

Touching ⇑ or ⇓ switches the selection to the next or previous page in the list.

Touching ⤴ displays the content of the upper folder (parent folder). If the uppermost folder is listed, ⤴ cannot be used.

3 Touch the track you want to play.

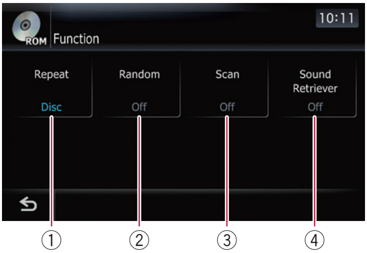
❐ To cancel the list screen, touch [**Detail**]. ■

Using the "Function" menu

1 Touch [Disc] on the "AV Source" menu to display the "ROM" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 **Touch ⚙.**



Repeat: Disc
Random: Off
Scan: Off
Sound Retriever: Off

① **Repeating play**
Each touch of [**Repeat**] changes the setting as follows:
- **Disc** — Repeats all compressed audio files
- **Track** — Repeats just the current track
- **Folder** — Repeats the current folder

❒ If you select another folder during repeat play, the repeat play range changes to [**Disc**].
❒ If you perform fast forward/rewind during [**Track**], the repeat play range changes to [**Folder**].
❒ When [**Folder**] is selected, it is not possible to play back a subfolder of that folder.
❒ When playing discs with compressed audio files and audio data (CD-DA), repeat play is performed within the currently playing data session even if [**Disc**] is selected.

② **Play tracks in a random order**
Touching [**Random**] switches between [**On**] and [**Off**]. When using **ROM**, the tracks in the current repeat play range are randomly played.
❒ If you turn [**Random**] to [**On**] when the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically.

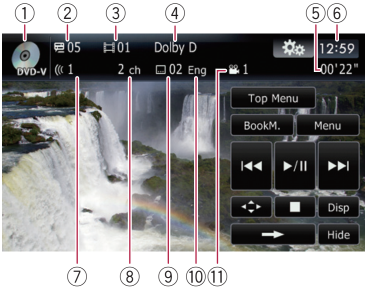
③ **Scan folders and tracks**
Scan play lets you hear the first 10 seconds of each track. Scan play is performed in the current repeat play range.
Touching [**Scan**] switches between [**On**] and [**Off**]. When you find the track you want, touch [**Scan**] to turn scan play off.
❒ After completion of track or folder scanning, normal playback of the tracks will begin again.
❒ If you turn [**Scan**] to [**On**] when the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically.
❒ If you turn [**Scan**] to [**On**] while the repeat play range is set to [**Disc**], scan play is performed for only the first tracks of each folder.

④ **Uses "Sound Retriever" function**
"**Sound Retriever**" function automatically enhances compressed audio and restores rich sound.
Each touch of [**Sound Retriever**] changes the setting as follows:
- **MODE 1**: Activates "**Sound Retriever**" function.
- **MODE 2**: Activates "**Sound Retriever**" function.
- **Off**: Deactivates "**Sound Retriever**" function.

❒ **MODE 2** is more effective than **MODE 1**. ■

You can play a DVD-Video using the built-in drive of the navigation system. This section describes operations for playing a DVD-Video.

Reading the screen


①
②
③
④
⑤
⑥
05
01
Dolby D
12:59
DVD-V
1
2 ch
02 Eng
1
00'22"
Top Menu
BookM.
Menu
Disp
Hide
⑦
⑧
⑨
⑩
⑪

① **Source icon**
Shows which source has been selected.

② **Title number indicator**
Shows the title number currently playing.

③ **Chapter number indicator**
Shows the chapter currently playing.

④ **Digital sound format indicator**
Shows which digital sound format (surround sound format) has been selected.

⑤ **Play time indicator**
Shows the elapsed playing time within the current title.

⑥ **Current time**

⑦ **Audio track indicator**
Shows the audio track number and audio language currently selected.

⑧ **Audio channel indicator**
Shows the current audio channel type, such as “**Mch**” (Multi-channel).

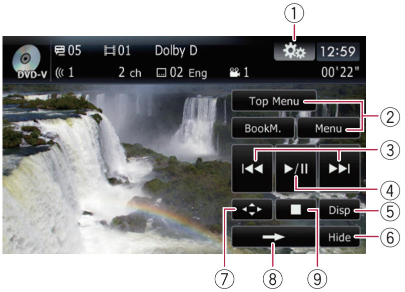
⑨ **Subtitle number indicator**
Shows the subtitle number currently selected.

⑩ **Subtitle language indicator**
Shows the subtitle language currently selected.

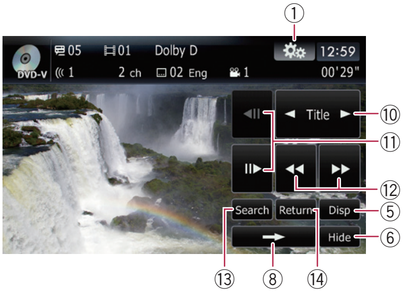
⑪ **Viewing angle indicator**
Shows what viewing angle has been selected. ■

Using the touch panel keys

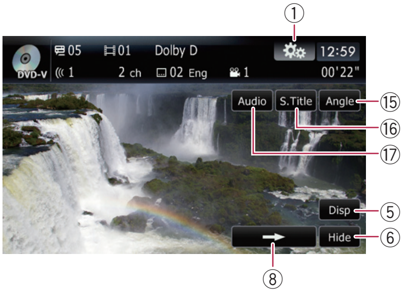
Playback screen (page1)


①
05
01
Dolby D
12:59
DVD-V
1
2 ch
02 Eng
1
00'22"
Top Menu
BookM.
Menu
Disp
Hide
②
③
④
⑤
⑥
⑦
⑧
⑨

Playback screen (page2)


①
05
01
Dolby D
12:59
DVD-V
1
2 ch
02 Eng
1
00'29"
Title
Search
Return
Disp
Hide
⑩
⑪
⑫
⑤
⑥
⑬
⑧
⑭

Playback screen (page3)


①
05
01
Dolby D
12:59
DVD-V
1
2 ch
02 Eng
1
00'22"
Audio
S.Title
Angle
Disp
Hide
⑮
⑯
⑰
⑤
⑥
⑧

❐ With some discs, the icon ⊘ may be displayed, meaning that the operation is invalid.

① **Display the “Function” menu**
➲ For details, refer to *Using the “***Function***” menu* on page 121.

② **Display the DVD menu**

You can display the menu by touching [**Menu**] or [**Top Menu**] while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

③ **Skip forward or backward**
Touching [▶▶I] skips to the start of the next chapter. Touching [I◀◀] once skips to the start of the current chapter. Touching it again will skip to the previous chapter.

❒ You can also perform these operations by using the **TRK** (◀/▶) button.

④ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

⑤ **Switch the display**
Touching [**Disp**] changes the indication on the information plate as follows:
Disc information display — Repeat range and L/R select display

⑥ **Hide the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑦ **Display the DVD menu keypad**

➲ For details, refer to *Using DVD menu by touch panel keys* on the next page.

⑧ **Switch next page of touch panel keys**

⑨ **Stop playback**

⑩ **Skip the title forward or backward**
Touching [▶] skips to the start of the next title. Touching [◀] skips to the start of the previous title.

⑪ **Frame-by-frame playback (or slow-motion playback)**

➲ For details, refer to *Frame-by-frame playback* on page 121.

➲ For details, refer to *Slow motion playback* on page 121.

⑫ **Fast reverse or forward**
Touch [◀◀] or [▶▶] to perform fast reverse or forward.
If you touch and hold [◀◀] or [▶▶] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/II], [◀◀] or [▶▶] opposite to key pushed for five seconds.

⑬ **Searching for a desired scene and starting playback from a specified time**

➲ For details, refer to *Searching for a specific scene and starting playback from a specified time* on the next page.

⑭ **Perform an operation (such as resuming) that is stored on the disc**
When using a DVD that has a point recorded that indicates where to return to, the DVD returns to the specified point and begins playback from that point.

⑮ **Change the viewing angle (Multi-angle)**
Each touch of [**Angle**] switches between viewing angles.

❒ During playback of a scene shot from multiple angles, the angle icon 🎥 is displayed. Turn the angle icon display on or off using the “**DVD/DivX® Setup**” menu.

➲ For details, refer to *Setting the angle icon display* on page 130.

⑯ **Change the subtitle (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑰ **Change audio language and audio systems (Multi-audio)**
Each touch of [**Audio**] switches between audio languages and audio systems.

❒ DTS audio cannot be output, so select an audio setting other than DTS.

❒ Display indications such as **MPEG-A** and **Mch** indicate the audio system recorded on the DVD. Depending on the setting, playback may not use the same audio system as that indicated.

Resuming playback (Bookmark)

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

- **Touching [BookM.]:**

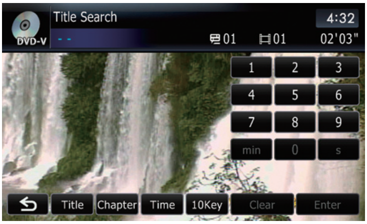
You can bookmark one point for each of up to five discs. If you try to memorize another point for the same disc, the oldest bookmark will be overwritten by the newest one.
- ❐ To clear the bookmark on a disc, touch and hold [**BookM.**].

Searching for a specific scene and starting playback from a specified time

You can search for the scene you want by specifying a title or a chapter, and the time.

❐ Chapter search and time search are not possible when disc playback has been stopped.

1 Touch [Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).



2 Touch the keys to input the target number or time and then touch [Enter].

For titles, chapters
- To select 3, touch [**3**] and [**Enter**] in order.
- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

For time (time search)
- To select 5 minutes 03 seconds, touch [**5**], [**min**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**min**], [**0**], [**0**] and [**Enter**] in order.
- To select 100 minutes 05 seconds, touch [**1**], [**0**], [**0**], [**5**], [**s**] and [**Enter**] in order.
- ❐ To cancel an input number, touch [**Clear**]. To cancel the input numbers, touch and hold [**Clear**].

Direct number search

You can use this function when you need to enter a numerical command during DVD playback.

1 Touch [10Key].

2 Touch [0] to [9] to input the desired number.

3 While the input number is displayed, touch [Enter].

Operating the DVD menu

You can operate the DVD menu by touching the menu item on the screen directly.

❐ This function can be used when the ✣ key is displayed on the lower right corner of the LCD screen.

❐ This function may not work properly with some DVD disc content. In that case, use touch panel keys to operate the DVD menu.

❐ If you touch the screen while ✣ is displayed, the touch panel keys will not be displayed.

1 Touch the screen to display the touch panel keys.

2 Touch [Top Menu] or [Menu] to display touch panel keys to operate the DVD menu.

3 Touch the desired menu item.

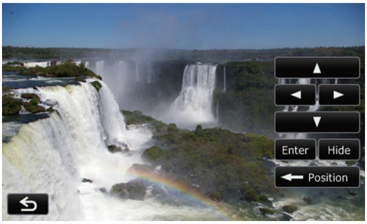
▪ Touch ✣.

The touch panel keys to select the menu item are displayed.

Using DVD menu by touch panel keys

If items on the DVD menu appear, the touch panel keys may overlay them. If so, select an item using those touch panel keys.

1 Touch [▲], [▼], [◀] or [▶] to select the desired menu item.



❒ If the touch panel keys for DVD menu selection disappear, touching anywhere on the screen, then touching ✥ displays them again.

2 Touch [Enter].

Playback starts from the selected menu item.

The way to display the menu differs depending on the disc.

- Touch [**Position**].

Each touch of [**Position**] changes the display position of touch panel keys.

- Touch [**Hide**].

The touch panel keys are hidden.

And ✥ is displayed, so you can select a menu item by touching the screen.

Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

● Touch [II▶] during playback.

Each time you touch [II▶], you move ahead one frame.

To return to normal playback, touch [▶/II].

❒ With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Touch and hold [II▶] until II▶ is displayed during playback.

The icon II▶ is displayed, and forward slow motion playback begins.

❒ To return to normal playback, touch [▶/II].

2 Touch [◀II] or [II▶] to adjust playback speed during slow motion playback.

Each time you touch [◀II] or [II▶] it changes the speed in four steps in the following order:

1/16 ↔ 1/8 ↔ 1/4 ↔ 1/2

❒ There is no sound during slow motion playback.

❒ With some discs, images may be unclear during slow motion playback.

❒ Reversed slow motion playback is not possible. ■

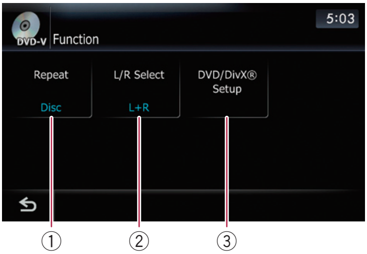
Using the “Function” menu

1 Touch [Disc] on the “AV Source” menu to display the “DVD-V” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch the screen to display the touch panel keys.

3 Touch ⚙.



① **Repeating play**

Each touch of [**Repeat**] changes the setting as follows:

- **Disc** — Plays throughout the current disc
- **Title** — Repeats just the current title
- **Chapter** — Repeats just the current chapter

❒ If you perform chapter (title) search, fast forward, fast reverse or slow motion playback, the repeat play range changes to “**Disc**”.

❒ This function is not available when disc playback has been stopped.

② **Selecting audio output**

When playing DVDs recorded with LPCM audio, you can switch the audio output. Touch [**L/R Select**] repeatedly until the desired audio output appears in the display. Each touch of [**L/R Select**] changes the settings as follows:

- **L+R** — Left and right
- **L** — Left
- **R** — Right
- **Mix** — Mixing left and right

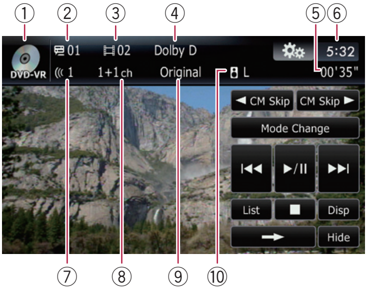
❒ This function is not available when disc playback has been stopped.

③ **DVD setup adjustments**

➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on page 130. ■

You can play a DVD-VR (DVD Video Recording Format) disc using the built-in drive of the navigation system. This section describes operations for DVD-VR discs.

Reading the screen


①
②
③
④
⑤⑥
DVD-VR
01
02
Dolby D
5:32
1
1+1ch
Original
L
00'35"
◄ CM Skip
CM Skip ►
Mode Change
List
Disp
Hide
⑦
⑧
⑨
⑩

① **Source icon**
Shows which source has been selected.

② **Title number indicator**
Shows the title number currently playing.

③ **Chapter number indicator**
Shows the chapter currently playing.

④ **Digital sound format indicator**
Shows which digital sound format (surround sound format) has been selected.

⑤ **Play time indicator**
Shows the elapsed playing time within the current title.

⑥ **Current time**

⑦ **Audio track indicator**
Shows the audio track number currently selected.

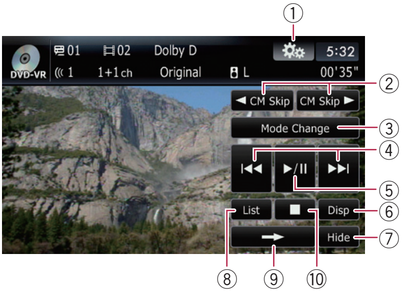
⑧ **Audio channel indicator**
Shows the current audio channel type, such as “**Mch**” (Multi-channel).

⑨ **Play mode indicator**
Shows the current play mode.
➲ For details, refer to *Switch the playback mode* on page 125.

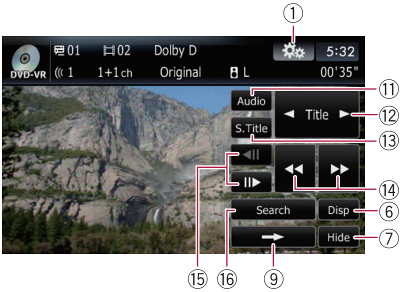
⑩ **Mixing condition indicator**
Shows the current mixing condition. ■

Using the touch panel keys

Playback screen (page1)


①
DVD-VR
01
02
Dolby D
5:32
1
1+1ch
Original
L
00'35"
◄ CM Skip
CM Skip ►
Mode Change
List
Disp
Hide
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

Playback screen (page2)


①
DVD-VR
01
02
Dolby D
5:32
1
1+1ch
Original
L
00'35"
Audio
◄ Title ►
S.Title
Search
Disp
Hide
⑪
⑫
⑬
⑭
⑥
⑦
⑮
⑯
⑨

❐ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Display the “Function” menu**
➲ For details, refer to *Using the “**Function**” menu* on page 126.

② **◄ CM Skip/CM Skip ►**
➲ For details, refer to *Using the short-time skip function* on page 125.

③ **Switch the playback mode**
➲ For details, refer to *Switch the playback mode* on page 125.

④ **Skip forward or backward**
Touching [►►I] skips to the start of the next chapter. Touching [I◄◄] once skips to the start of the current chapter. Touching it again will skip to the previous chapter.
❐ You can also perform these operations by using the **TRK** (◄/►) button.

⑤ **Playback and Pause**

Touching [**▶/II**] switches between playback and pause.

⑥ **Switch the display**
Touching [**Disp**] changes the information as follows:
Disc information display — Repeat range display

⑦ **Hide the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑧ **Display the title list**
Displays the title list recorded on the disc.

⑨ **Switch next page of touch panel keys**

⑩ **Stop playback**

⑪ **Change audio tracks (Multi-audio)**
Each touch of [**Audio**] switches between audio tracks.

❒ Display indications such as **MPEG-A** and **Mch** indicate the audio system recorded on the DVD. Depending on the setting, playback may not use the same audio system as that indicated.

⑫ **Skip the title forward or backward**
Touching [▶] skips to the start of the next title.
Touching [◀] skips to the start of the previous title.

⑬ **Change the subtitle (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑭ **Fast reverse or forward**
Touch [**◀◀**] or [**▶▶**] to perform fast reverse or forward.
If you touch and hold [**◀◀**] or [**▶▶**] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [**▶/II**], [**◀◀**] or [**▶▶**] opposite to key pushed for five seconds.

⑮ **Frame-by-frame playback (or slow-motion playback)**

➲ For details, refer to *Frame-by-frame playback* on the next page.

➲ For details, refer to *Slow motion playback* on the next page.

⑯ **Searching for a desired scene and starting playback from a specified time**

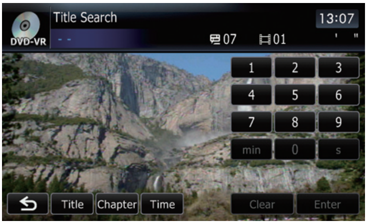
➲ For details, refer to *Searching for a specific scene and starting playback from a specified time* on this page.

Searching for a specific scene and starting playback from a specified time

You can search for the scene you want by specifying a title or a chapter, and the time.

❒ Chapter search and time search are not possible when disc playback has been stopped.

1 Touch [Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).



2 Touch the keys to input the target number or time and then touch [Enter].

For titles, chapters

- To select 3, touch [**3**] and [**Enter**] in order.
- To select 10, touch [**1**] and [**0**] and [**Enter**] in order.

For time (time search)

- To select 5 minutes 03 seconds, touch [**5**], [**min**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**min**], [**0**], [**0**] and [**Enter**] in order.
- To select 100 minutes 05 seconds, touch [**1**], [**0**], [**0**], [**5**], [**s**] and [**Enter**] in order.

❒ To cancel an input number, touch [**Clear**]. To cancel the input numbers, touch and hold [**Clear**].

Switch the playback mode

You have two methods for playing DVD-VR discs; **Original** (original) and **Playlist** (playlist).

❐ Titles created with DVD recorders are called original. Those based on original, rearranged titles are called playlist. Playlists are created on DVD-R/-RW discs.

● **Touch [Mode Change] to switch the play mode.**

If the play mode is changed, playback starts from the beginning of the selected play mode.

Using the short-time skip function

This function enables you to skip over your specified interval on the video playback. This is useful to skip commercials on your recorded DVD-VR disc.

● **To skip progressively backward or forward, touch [◀ CM Skip] or [CM Skip ▶].**

Each touch of [◀ **CM Skip**] or [**CM Skip** ▶] changes steps in the following order:

◀ CM Skip

5 sec. — 15 sec. — 30 sec. — 1 min. — 2 min. — 3 min. — 0 sec.

CM Skip ▶

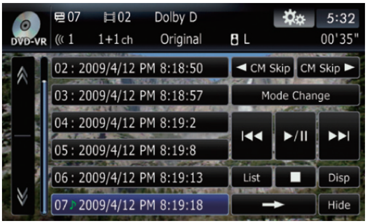
30 sec. — 1 min. — 1.5 min. — 2 min. — 3 min. — 5 min. — 10 min. — 0 sec.

Playing by selecting from the title list

You can select and play the title you want from the list.

1 Touch [List] on the playback screen.

2 Touch the title to play from the list.



❐ Touching ⩓ or ⩔ switches the selection to the next or previous page in the list.

3 To return to the previous screen, touch [List].

Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

● **Touch [II▶] during playback.**

Each time you touch [II▶], you move ahead one frame.

To return to normal playback, touch [▶/**II**].

❐ With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

1 Touch and hold [II▶] until ▮▮▶ is displayed during playback.

The icon ▮▮▶ is displayed, and forward slow motion playback begins.

❐ To return to normal playback, touch [▶/**II**].

2 Touch [◀II] or [II▶] to adjust playback speed during slow motion playback.

Each time you touch [◀II] or [II▶] it changes the speed in four steps in the following order:

1/16 ⟷ 1/8 ⟷ 1/4 ⟷ 1/2

❐ There is no sound during slow motion playback.

❐ With some discs, images may be unclear during slow motion playback.

❐ Reversed slow motion playback is not possible. ▣

Using the “Function” menu

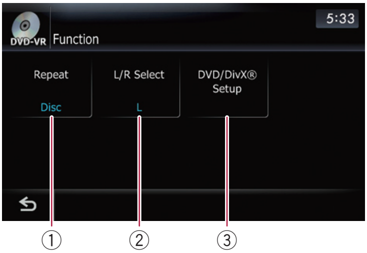
1 Touch [Disc] on the “AV Source” menu to display the “DVD-VR” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch the screen to display the touch panel keys.

3 Touch ⚙.

Function menu



① **Repeating play**
Each touch of [**Repeat**] changes the setting as follows:
- **Title** — Repeats just the current title
- **Chapter** — Repeats just the current chapter
- **Disc** — Plays throughout the current disc

❒ If you perform chapter (title) search, fast forward, fast reverse or slow motion playback, the repeat play range changes to “**Disc**”.

❒ This function is not available when disc playback has been stopped.

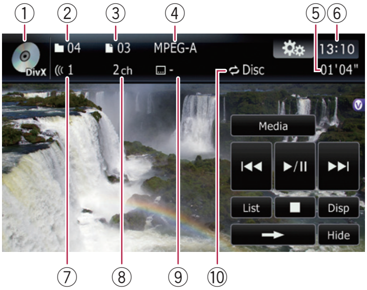
② **Selecting audio output**
When playing DVDs that both channels are recorded in monaural, you can switch the audio output. Touch [**L/R Select**] repeatedly until the desired audio output appears in the display.
- **L+R** — Left and right
- **L** — Left
- **R** — Right
- **Mix** — Mixing left and right

❒ This function is not available when disc playback has been stopped.

③ **DVD setup adjustments**
➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on page 130. ■

You can play a DivX disc using the built-in drive of the navigation system. This section describes that operations.

Reading the screen


①
②
③
④
⑤
⑥
04
03
MPEG-A
13:10
1
2ch
Disc
01'04"
DivX
Media
List
Disp
Hide
⑦
⑧
⑨
⑩

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**
Shows the folder number currently playing.

③ **File number indicator**
Shows the file number currently playing.

④ **Digital sound format indicator**
Shows the digital sound format (surround sound format) currently selected.

⑤ **Play time indicator**
Shows the elapsed playing time of the current file.

⑥ **Current time**

⑦ **Audio track indicator**
Shows the audio track number currently selected.

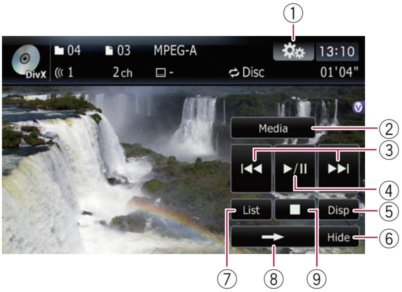
⑧ **Audio channel indicator**
Shows the current audio channel type, such as "**Mch**" (Multi-channel).

⑨ **Subtitle number indicator**
Shows the subtitle number currently selected.

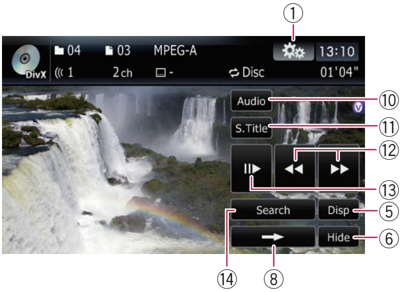
⑩ **Repeat range indicator**
Shows which repeat range has been selected. ■

Using the touch panel keys

Playback screen (page1)


①
04
03
MPEG-A
13:10
1
2ch
Disc
01'04"
DivX
Media
List
Disp
Hide
②
③
④
⑤
⑥
⑦
⑧
⑨

Playback screen (page2)


①
04
03
MPEG-A
13:10
1
2ch
Disc
01'04"
DivX
Audio
S.Title
Search
Disp
Hide
⑩
⑪
⑫
⑬
⑤
⑥
⑭
⑧

❒ With some discs, the icon ⊘ may be displayed, meaning that the operation is not valid.

① **Display the "Function" menu**
➲ For details, refer to *Using the "**Function**" menu* on page 129.

② **Switch the media file type played**
When playing a disc containing a mixture of various media file types, you can switch between media files types to play.
Touch [**Media**] repeatedly to switch between the following media file types:
CD (audio data (CD-DA)) — **ROM** (compressed audio file) — **DivX** (DivX video files)
❒ This touch panel key appears only when playing a disc containing a mixture of various media file types.

③ **Skip forward or backward**

Touching [▶▶|] skips to the start of the next file. Touching [|◀◀] once skips to the start of the current file. Touching again will skip to the previous file.

❐ You can also perform these operations by using the **TRK** (◀/▶) button.

④ **Playback and Pause**
Touching [▶/❚❚] switches between playback and pause.

⑤ **Switch the information**
Touching [**Disp**] changes the content of the information panel as follows:
Disc information display — Current folder display — File name display

⑥ **Hide the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑦ **Display the title list**
Displays the title list recorded on the disc.

⑧ **Switch next page of touch panel keys**

⑨ **Stop playback**

⑩ **Change audio tracks (Multi-audio)**
Each touch of [**Audio**] switches between audio tracks.

⑪ **Change the subtitle (Multi-subtitle)**
Each touch of [**S.Title**] switches between the subtitle languages.

⑫ **Fast reverse or forward**
Touch [◀◀] or [▶▶] to perform fast reverse or forward.
If you touch and hold [◀◀] or [▶▶] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/❚❚], [◀◀] or [▶▶] opposite to key pushed for five seconds.

⑬ **Frame-by-frame playback (or slow-motion playback)**

➲ For details, refer to *Frame-by-frame playback* on this page.

➲ For details, refer to *Slow motion playback* on this page.

⑭ **Searching for a desired scene and starting playback from a specified time**

➲ For details, refer to *Searching for a specific scene and starting playback from a specified time* on this page.

Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

- **Touch [❙❙▶] during playback.**

Each time you touch [❙❙▶], you move ahead one frame.
To return to normal playback, touch [▶/❚❚].

❐ With some discs, images may be unclear during frame-by-frame playback.

Slow motion playback

This lets you slow down playback speed.

- **Touch and hold [❙❙▶] until ❚❚▶ is displayed during playback.**

The icon ❚❚▶ is displayed, and forward slow motion playback begins.

❐ To return to normal playback, touch [▶▶] or [◀◀], etc.

❐ There is no sound during slow motion playback.

❐ With some discs, images may be unclear during slow motion playback.

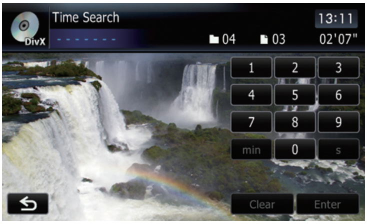
❐ Reversed slow motion playback is not possible.

Searching for a specific scene and starting playback from a specified time

You can search for a desired scene by specifying the time.

❐ Time search are not possible when disc playback has been stopped.

1 **Touch [Search].**



2 Touch the keys to input the target number or time and then touch [Enter].

For time (time search)

- To select 5 minutes 03 seconds, touch [**5**], [**min**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**min**], [**0**], [**0**] and [**Enter**] in order.
- To select 100 minutes 05 seconds, touch [**1**], [**0**], [**0**], [**5**], [**s**] and [**Enter**] in order.

❒ To cancel an input number, touch [**Clear**]. To cancel the input numbers, touch and hold [**Clear**].

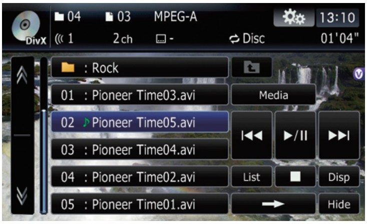
Playing by selecting from the title list

You can select and play the title you want from the list.

1 Touch [List] on the playback screen.

The contents of the folder in which the currently playing file is located are displayed.

2 Touch the title to play from the list.


DivX
04
03
MPEG-A
13:10
1
2ch
-
Disc
01'04"
: Rock
01 : Pioneer Time03.avi
Media
02 Pioneer Time05.avi
03 : Pioneer Time04.avi
04 : Pioneer Time02.avi
List
Disp
05 : Pioneer Time01.avi
Hide

❒ Touching ▲ or ▼ switches the selection to the next or previous page in the list.

3 To return to the previous screen, touch [List]. ■

Using the “Function” menu

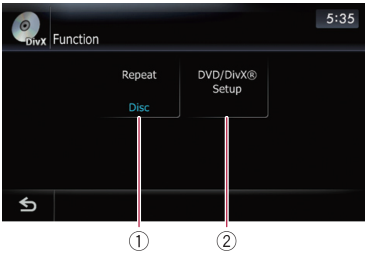
1 Touch [Disc] on the “AV Source” menu to display the “DivX” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch the screen to display the touch panel keys.

3 Touch ⚙.

Function menu


DivX
Function
5:35
Repeat
Disc
DVD/DivX®
Setup
①
②

① **Repeating play**

Each touch of [**Repeat**] changes the setting as follows:

- **File** — Repeat just the current file
- **Folder** — Repeat just the current folder
- **Disc** — Plays throughout the current disc

❒ If you select another folder during repeat play, the repeat play range changes to [**Disc**].

❒ If you perform fast reverse or fast forward during “**File**”, the repeat play range changes to “**Folder**”.

❒ When [**Folder**] is selected, it is not possible to play back a subfolder of that folder.

❒ When playing discs with compressed audio files and audio data (CD-DA), repeat play is performed within DivX videos even if [**Disc**] is selected.

② **DVD setup adjustments**

➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on the next page. ■

Configure the DVD-Video/DVD-VR/DivX player.

Displaying DVD/DivX® Setup menu

1 Play the disc that contains DVD-Video, DVD-VR or DivX.

2 Touch [Disc] on the "AV Source" menu to display the normal playback screen.

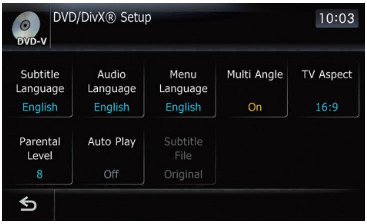
- ➲ For details concerning operations, refer to *Screen switching overview* on page 36.

3 Touch ⚙.

The "**Function**" menu appears.

4 Touch [DVD/DivX® Setup].

The "**DVD/DivX® Setup**" screen appears.



DVD/DivX® Setup 10:03

Subtitle Language	Audio Language	Menu Language	Multi Angle	TV Aspect
English	English	English	On	16:9
Parental Level	Auto Play	Subtitle File		
8	Off	Original		

5 Touch the desired function. ■

Setting the top-priority languages

You can assign the top-priority language to the top-priority subtitle, audio and menu in initial playback. If the selected language is recorded on the disc, subtitles, audio and menu are displayed or output in that language.

1 Display the "DVD/DivX® Setup" screen.

- ➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on this page.

2 Touch [Subtitle Language], [Audio Language] or [Menu Language].

Each language menu is displayed and the currently set language is selected.

3 Touch the desired language.

When you select [**Others**], a language code input display is shown. Input the four digit code of the desired language then touch [**Enter**].

- ➲ Refer to *Language code chart for DVDs* on page 133.
- ❐ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.
- ❐ You can also switch the subtitle and audio language by touching [**S.Title**] or [**Audio**] during playback.
- ❐ Even if you use [**S.Title**] or [**Audio**] to switch the subtitle or audio language, this does not affect the settings here. ■

Setting the angle icon display

You can set the angle icon 🎥 to display in scenes where the angle can be switched.

1 Display the "DVD/DivX® Setup" screen.

- ➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on this page.

2 Touch [Multi Angle].

Touching [**Multi Angle**] switches between [**On**] and [**Off**]. ■

Setting the aspect ratio

There are two kinds of displays. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use a regular rear display with a TV aspect of 4:3, you can set the aspect ratio suitable for your rear display. (We recommend use of this function only when you want to fit it to the rear display.)

- ❐ When using a regular display, select either "**Letter Box**" or "**Panscan**". Selecting "**16:9**" may result in an unnatural picture.

1 Display the "DVD/DivX® Setup" screen.

- ➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on this page.

2 Touch [TV Aspect].

Each touch of [**TV Aspect**] changes the setting as follows:

- **16:9** — Wide screen picture (16:9) is displayed as it is (initial setting)
- **Letter Box** — The picture is in the shape of a letter box with black bands at the top and bottom of the screen
- **Panscan** — The picture is cut short at the right and left of the screen

❒ When playing discs that do not have a panscan system, the disc is played back with [**Letter Box**] even if you select [**Panscan**] setting. Confirm whether the disc package bears the 16 : 9 LB mark.

❒ Some discs do not enable changing of the TV aspect. For details, refer to the disc's instructions. ■

Setting the parental lock

Some DVD-Video discs let you use parental lock to set restrictions so that children cannot watch violent or adult-oriented scenes. You can set the parental lock level in steps as desired.

❒ When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

1 Display the “DVD/DivX® Setup” screen.

➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on the previous page.

2 Touch [Parental Level].

3 Touch [0] to [9] to input a four-digit code number.

4 While the input number is displayed, touch [Enter].

The code number is registered, and you can now set the level.

5 Touch any of [1] to [8] to select the desired level.

The parental lock level is set.

- **Level 8** — Playback of the entire disc is possible (initial setting)
- **Level 7** to **Level 2** — Playback of discs for children and non-adult oriented discs is possible
- **Level 1** — Only playback of discs for children is possible

❒ If you want to change the parental level already set, enter the registered code number and then select the parental level.

❒ We recommend that you keep a record of your code number in case you forget it.

❒ The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. You cannot use parental lock with discs that do not feature a recorded parental lock level.

❒ With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

❒ If you forget the registered code number, touch < 10 times on the number input screen. The registered code number is canceled, letting you register a new one. ■

Setting “Auto Play”

When a DVD disc with DVD menu is inserted, this unit will cancel the DVD menu automatically and start playback from the first chapter of the first title.

❒ This function is available for DVD-Video.

❒ Some DVDs may not operate properly. If this function is not fully operable, turn this function off and start playback.

1 Display the “DVD/DivX® Setup” screen.

➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on page 130.

2 Touch [Auto Play].

Touching [**Auto Play**] switches this setting between [**On**] and [**Off**].

❒ When [**Auto Play**] is set to [**On**], the repeat range is automatically set to [**Disc**]. ■

Setting the subtitle file for DivX

You can select whether to display DivX external subtitles or not.

❒ If no DivX external subtitle files exist, the original DivX subtitles are displayed even when [**Custom**] is selected.

1 Display the “DVD/DivX® Setup” screen.

➲ For details, refer to *Displaying* **DVD/DivX® Setup** *menu* on page 130.

2 Touch [Subtitle File].

Touching [**Subtitle File**] switches this setting between [**Original**] and [**Custom**].

❒ Up to 42 characters can be displayed on one line. If more than 42 characters are set, the line breaks and the characters are displayed on the next line.

❒ Up to 126 characters can be displayed on one screen. If more than 126 characters are set, the excess characters will not be displayed.

❒ The DivX subtitles will be displayed even when the subtitle file setting is on if no corresponding subtitle files exist.

❒ Up to three lines can be displayed at once. ■

Language code chart for DVDs

Language (code), input code
Japanese (ja), 1001
English (en), 0514
French (fr), 0618
Spanish (es), 0519
German (de), 0405
Italian (it), 0920
Chinese (zh), 2608
Dutch (nl), 1412
Portuguese (pt), 1620
Swedish (sv), 1922
Russian (ru), 1821
Korean (ko), 1115
Greek (el), 0512
Afar (aa), 0101
Abkhazian (ab), 0102
Afrikaans (af), 0106
Amharic (am), 0113
Arabic (ar), 0118
Assamese (as), 0119
Aymara (ay), 0125
Azerbaijani (az), 0126
Bashkir (ba), 0201
Belorussian (be), 0205
Bulgarian (bg), 0207
Bihari (bh), 0208
Bislama (bi), 0209
Bengali, Bangla (bn), 0214
Tibetan (bo), 0215
Breton (br), 0218
Catalan (ca), 0301
Corsican (co), 0315
Czech (cs), 0319
Welsh (cy), 0325
Danish (da), 0401
Bhutani (dz), 0426
Esperanto (eo), 0515
Estonian (et), 0520
Basque (eu), 0521
Persian (fa), 0601
Finnish (fi), 0609
Fiji (fj), 0610
Faroese (fo), 0615
Frisian (fy), 0625
Irish (ga), 0701
Scottish Gaelic (gd), 0704
Galician (gl), 0712
Guarani (gn), 0714
Gujarati (gu), 0721
Hausa (ha), 0801
Hindi (hi), 0809
Croatian (hr), 0818
Hungarian (hu), 0821
Armenian (hy), 0825
Interlingua (ia), 0901
Interlingue (ie), 0905
Inupiak (ik), 0911
Indonesian (in), 0914
Icelandic (is), 0919
Hebrew (iw), 0923
Yiddish (ji), 1009
Javanese (jw), 1023
Georgian (ka), 1101
Kazakh (kk), 1111
Greenlandic (kl), 1112
Cambodian (km), 1113
Kannada (kn), 1114
Kashmiri (ks), 1119
Kurdish (ku), 1121
Kirghiz (ky), 1125
Latin (la), 1201
Lingala (In), 1214
Laotian (lo), 1215
Lithuanian (lt), 1220
Latvian, Lettish (lv), 1222
Malagasy (mg), 1307
Maori (mi), 1309
Macedonian (mk), 1311
Malayalam (ml), 1312
Mongolian (mn), 1314
Moldavian (mo), 1315
Marathi (mr), 1318
Malay (ms), 1319
Maltese (mt), 1320
Burmese (my), 1325
Nauru (na), 1401
Nepali (ne), 1405
Norwegian (no), 1415
Occitan (oc), 1503
Oromo (om), 1513
Oriya (or), 1518
Panjabi (pa), 1601
Polish (pl), 1612
Pashto, Pushto (ps), 1619
Quechua (qu), 1721
Rhaeto-Romance (rm), 1813
Kirundi (rn), 1814
Rumanian (ro), 1815
Kinyarwanda (rw), 1823
Sanskrit (sa), 1901
Sindhi (sd), 1904
Sango (sg), 1907
Serbo-Croatian (sh), 1908
Singhalese (si), 1909
Slovak (sk), 1911
Slovenian (sl), 1912
Samoan (sm), 1913
Shona (sn), 1914
Somali (so), 1915
Albanian (sq), 1917
Serbian (sr), 1918
Siswati (ss), 1919
Sesotho (st), 1920
Sundanese (su), 1921
Swahili (sw), 1923
Tamil (ta), 2001
Telugu (te), 2005
Tajik (tg), 2007
Thai (th), 2008
Tigrinya (ti), 2009
Turkmen (tk), 2011
Tagalog (tl), 2012
Setswana (tn), 2014
Tongan (to), 2015
Turkish (tr), 2018
Tsonga (ts), 2019
Tatar (tt), 2020
Twi (tw), 2023
Ukrainian (uk), 2111
Urdu (ur), 2118
Uzbek (uz), 2126
Vietnamese (vi), 2209
Volapük (vo), 2215
Wolof (wo), 2315
Xhosa (xh), 2408
Yoruba (yo), 2515
Zulu (zu), 2621

You can play the compressed audio files stored in the external storage device (USB, SD).

❒ In the following description, the SD memory card and USB memory device are collectively referred to as the “external storage device (USB, SD)”. If it indicates the USB memory device only, it is referred to as the “USB storage device”.

Starting procedure

1 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

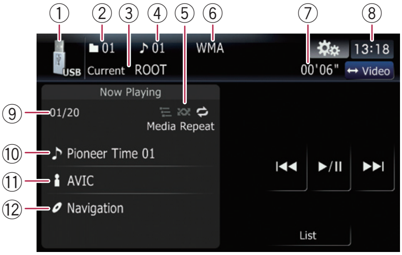
➲ For details, refer to *Plugging in a USB storage device* on page 33.

➲ For details, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Touch [USB] or [SD] on the “AV Source” menu to display the “USB” or “SD” screen.

❒ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02. ■

Reading the screen



❒ This unit may not achieve optimum performance with some external storage devices.

❒ You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with the USB storage device.

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**

③ **Current folder name indicator**
Shows the folder name currently playing.

④ **File number indicator**

⑤ **Playback condition indicator**
The marks shown below appears and indicates the current playback condition.

☰: Scan play

🔀: Random play

🔁: Repeat play

Indicator	Meaning
Media Repeat	All audio files in the current external storage device (USB, SD) are played repeatedly. This is the default condition.
Folder Repeat	All audio files in the current folder are played repeatedly.
Track Repeat	The current file is played repeatedly.
Media Random	All audio files in the current external storage device (USB, SD) are played in random order.
Folder Random	All audio files in the current folder are played in random order.
Media Scan	The beginning of the first audio files of each folder is played for about 10 seconds.
Folder Scan	The beginning of each track in the current folder is played for about 10 seconds.

➲ For more information, refer to *Using the “***Function***” menu* on page 136.

⑥ **File type indicator**
Shows the type of audio file currently playing.

⑦ **Play time indicator**
Shows the elapsed playing time within the current track.

⑧ **Current time**

⑨ **Current file number and total number of files**
Shows the file number currently played and the total number of playable audio files.

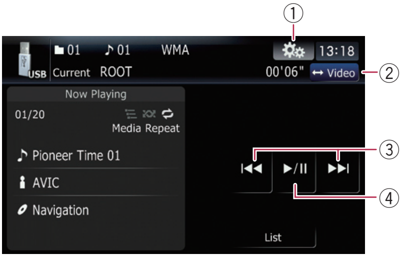
⑩ **Track title indicator**
Shows the title of the track currently playing (when available).
❐ If the title of a track is not available, the file name appears.

⑪ **Artist name indicator***
Shows the artist name currently playing (when available).

⑫ **Album title indicator***
Shows the title of the album for the current track (when available).

❐ The information marked with an asterisk (*) is displayed only when the information has been encoded on the compressed audio files. If specific information has not been encoded on the files, "—" is displayed instead. ▣

Using the touch panel keys (Music)


①
USB
01
♪01
WMA
13:18
Current ROOT
00'06"
↔ Video
②
Now Playing
01/20
Media Repeat
♪ Pioneer Time 01
AVIC
Navigation
③
I◀◀
▶/II
▶▶I
④
List

① **Display the "Function" menu**
➲ For details, refer to *Using the "**Function**" menu* on the next page.

② **Switch the operation screen**
Touching this key switches between the screen to operate music files and the screen to operate video files. This touch panel key is available only when there are both audio and video files in the external storage device (USB, SD).

③ **Skip forward or backward**
Touching [▶▶I] skips to the start of the next file. Touching [I◀◀] once skips to the start of the current file. Touching again will skip to the previous file.
Fast reverse or forward
Touch and hold [I◀◀] or [▶▶I] to fast reverse or fast forward.
❐ There is no sound on fast reverse or forward.
❐ You can also perform these operations by using the **TRK** (◀/▶) button.

④ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

Selecting a track from the list

The list lets you see the list of track titles or folder names on an external storage device (USB, SD). Touch a folder on the list to view its contents. Touch a track on the list to play that track.

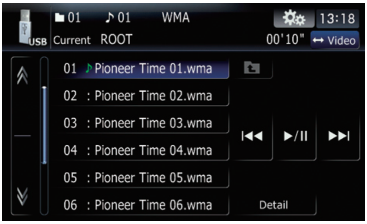
1 Touch [List].

The contents of the folder in which the currently playing file is located are displayed.

- Touch and hold [**List**].

The contents of the root folder are displayed.

2 Touch the folder that you want to view.


USB
01
♪01
WMA
13:18
Current ROOT
00'10"
↔ Video
01 ♪Pioneer Time 01.wma
02 : Pioneer Time 02.wma
03 : Pioneer Time 03.wma
04 : Pioneer Time 04.wma
05 : Pioneer Time 05.wma
06 : Pioneer Time 06.wma
I◀◀
▶/II
▶▶I
Detail

The track currently playing is highlighted.
Touching ︽ or ︾ switches the selection to the next or previous page in the list.
Touching ⤴ displays the content of the upper folder (parent folder). If the uppermost folder is listed, ⤴ cannot be used.

3 Touch the track you want to play.

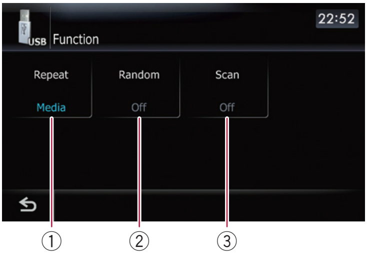
❒ To cancel the list screen, touch [**Detail**]. ■

Using the "Function" menu

1 Touch [USB] or [SD] on the "AV Source" menu to display the "USB" or "SD" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.



① **Repeating play**
Each touch of [**Repeat**] changes the setting as follows:

- **Media** — Repeat all compressed audio files in the selected external storage device (USB, SD)
- **Track** — Repeat just the current track
- **Folder** — Repeat the current folder

❒ If you skip the file forward or backward when the repeat play range in "**Track**", the repeat play range changes to "**Folder**".

② **Play tracks in a random order**
Random play lets you playback tracks in random order within the current repeat range.
Touching [**Random**] switches between [**On**] and [**Off**].

❒ If you turn [**Random**] to [**On**] while the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically.

③ **Scan folders and tracks**
Scan play lets you hear the first 10 seconds of each track. Scan play is performed in the current repeat play range.
Touching [**Scan**] switches between [**On**] and [**Off**]. When you find the track you want, touch [**Scan**] to turn scan play off.

❒ After all tracks or folders scanning are finished, normal playback will begin again.

❒ If you turn [**Scan**] to [**On**] while the repeat play range is set to [**Track**], the repeat play range changes to [**Folder**] automatically. ■

You can play the video files stored in the external storage device (USB, SD).

❒ In the following description, the SD memory card and USB memory device are collectively referred to as the "external storage device (USB, SD)". If it indicates the USB memory device only, it is referred to as the "USB storage device".

Starting procedure

1 Insert the SD memory card into the SD card slot or plug the USB storage device into the USB connector.

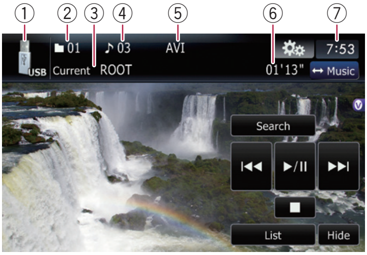
➲ For details, refer to *Plugging in a USB storage device* on page 33.

➲ For details, refer to *Inserting and ejecting an SD memory card* on page 31.

2 Touch [USB] or [SD] on the "AV Source" menu to display each operation screen.

❒ Playback is performed in order of folder numbers. Folders are skipped if they contain no playable files. If there are no playable files in folder 01 (root folder), playback starts from folder 02. ■

Reading the screen



❒ This unit may not achieve optimum performance with some external storage devices.

❒ You can playback the files on a USB storage device compliant with Mass Storage Class. For details about the USB Class, refer to the manual supplied with the USB storage device.

① **Source icon**
Shows which source has been selected.

② **Folder number indicator**

③ **Current folder name indicator**
Shows the folder name currently playing.

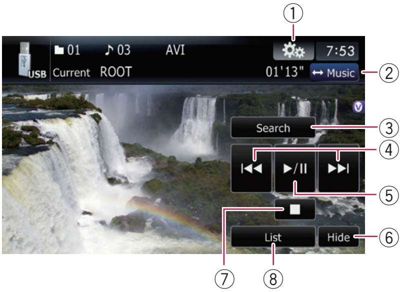
④ **File number indicator**

⑤ **File type indicator**
Shows the type of audio file currently playing.

⑥ **Play time indicator**
Shows the elapsed playing time within the current track.

⑦ **Current time** ■

Using the touch panel keys (Video)



① **Display the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on page 139.

② **Switch the operation screen**
Touching this key switches between the screen to operate music files and the screen to operate video files. This touch panel key is available only when there are both audio and video files in the external storage device (USB, SD).

③ **Searching for a desired scene and starting playback from a specified time**
➲ For details, refer to *Searching for a specific scene and starting playback from a specified time* on the next page.

④ **Skip forward or backward**

Touching [⏭] skips to the start of the next file. Touching [⏮] once skips to the start of the current file. Touching again will skip to the previous file.

Fast reverse or forward

Touch and hold [⏮] or [⏭] to fast rewind or fast forward.

❒ There is no sound on fast reverse or forward.

❒ You can also perform these operations by using the **TRK** (◀/▶) button.

⑤ **Playback and Pause**

Touching [▶/❚❚] switches between playback and pause.

⑥ **Hide the touch panel keys**

Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

⑦ **Stop playback**

⑧ **Display the title list**

Displays the title list recorded on the external storage device (USB, SD).

Playing by selecting from the title list

You can select and play the title you want from the list.

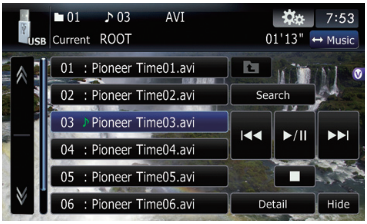
1 Touch [List] on the playback screen.

The contents of the folder in which the currently playing file is located are displayed.

■ Touch and hold [**List**].

The contents of the root folder are displayed.

2 Touch the title to play from the list.


01
03
AVI
7:53
USB
Current
ROOT
01'13"
↔ Music
01 : Pioneer Time01.avi
02 : Pioneer Time02.avi
03 Pioneer Time03.avi
04 : Pioneer Time04.avi
05 : Pioneer Time05.avi
06 : Pioneer Time06.avi
Search
Detail
Hide

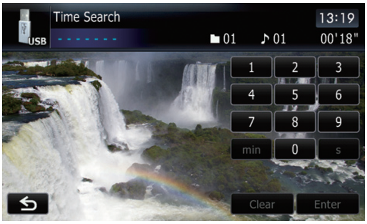
❒ Touching ⋀ or ⋁ switches the selection to the next or previous page in the list.

3 To return to the previous screen, touch [Detail].

Searching for a specific scene and starting playback from a specified time

You can search for a desired scene by specifying the time.

1 Touch [Search].


USB
Time Search
13:19
01
01
00'18"
1
2
3
4
5
6
7
8
9
min
0
s
Clear
Enter

2 Touch the keys to input the target number or time and then touch [Enter].

- To select 5 minutes 03 seconds, touch [**5**], [**min**], [**0**], [**3**] and [**Enter**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**min**], [**0**], [**0**] and [**Enter**] in order.
- To select 100 minutes 05 seconds, touch [**1**], [**0**], [**0**], [**5**], [**s**] and [**Enter**] in order.

❒ To cancel an input number, touch [**Clear**]. To cancel the input numbers, touch and hold [**Clear**]. ■

Using the “Function” menu

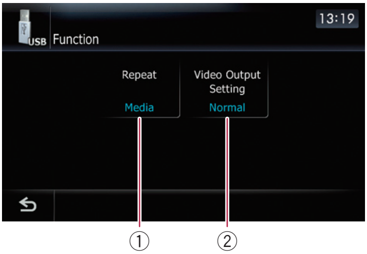
1 Touch [USB] or [SD] on the “AV Source” menu to display the “USB” or “SD” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch the screen to display the touch panel keys.

3 Touch ⚙.

❒ If the touch panel keys are not shown, touch anywhere on the screen to display them.



Repeat: Media

Video Output Setting: Normal

① **Changes the repeat range**
Each touch of [**Repeat**] changes the setting as follows:

- **Media** — Repeat all video files in the selected external storage device (USB, SD)
- **File** — Repeat just the current file
- **Folder** — Repeat the current folder

❒ If you skip the file forward or backward when the repeat play range in “**File**”, the repeat play range changes to “**Folder**”.

② **Changes the screen size of video**
If a video file is played, you can select the display mode between normal and full screen.
Each touch of [**Video Output Setting**] changes the setting as follows:

- **Normal** — Video files appear in normal size.
- **Full** — Video files appear in a full-screen. ■

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

❒ A USB interface cable for iPod (CD-IU50V) (sold separately) is required for connection.

Starting procedure

- **Connect your iPod.**

The source changes and then playback will start.

➲ For details, refer to *Connecting your iPod* on page 33.

❒ If the iPod is already connected, touch [**iPod**] on the "**AV Source**" menu.

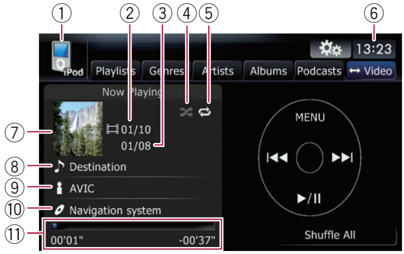
➲ For details concerning operations, refer to *Screen switching overview* on page 36.

❒ No video output if iPod is selected as AV source, check the setting in "**AV1 Input**" on the "**AV System Settings**" menu.

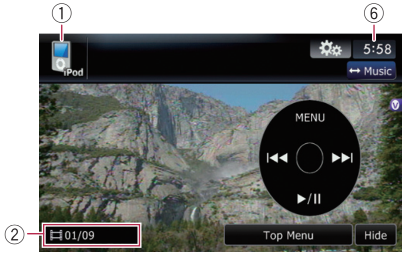
➲ For details, refer to *Setting video input 1 (**AV1**)* on page 162. ■

Reading the screen

Music


①
②
③
④
⑤
⑥
iPod
Playlists
Genres
Artists
Albums
Podcasts
↔ Video
13:23
Now Playing
01/10
01/08
⑦
⑧
Destination
⑨
AVIC
⑩
Navigation system
⑪
00'01"
-00'37"
MENU
▶/II
Shuffle All

Video


①
⑥
iPod
5:58
↔ Music
MENU
▶/II
②
01/09
Top Menu
Hide

① **Source icon**
Shows which source has been selected.

② **Chapter number indicator**
Shows the current chapter number and total number of chapters when the file with chapters played.

③ **Song number indicator**
Shows the number of the song currently playing and total number of songs in the selected list.

④ **Shuffle play indicator**
Appears when shuffle play is activated.

⑤ **Repeat play indicator**
Appears when repeat play is activated.
🔁: All-tracks repeat
🔂: One-track repeat

⑥ **Current time**

⑦ **Album artwork**
Album art of the current song is displayed if it is available.

⑧ **Song title (episode) indicator**
Shows the title of the current song. When a podcast is played, the episode is displayed.

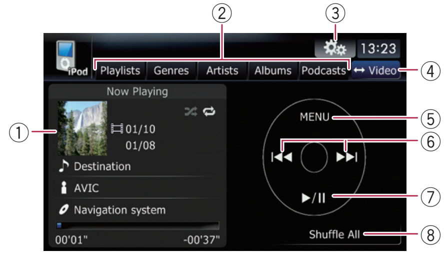
⑨ **Artist name (podcast title) indicator**
Shows the artist name currently playing. When a podcast is played, the podcast title is displayed.

⑩ **Album title (release date) indicator**
Shows the title of the album for the song. When a podcast is played, the release date is displayed.

⑪ **Play time indicator**
Shows the elapsed playing time within the current song.

❒ If characters recorded on the iPod are not compatible with this navigation system, they may turn into garbled characters. ■

Using the touch panel keys (Music)



① **Album artwork**
Touch the key to enlarge the album artwork. If you touch again, the artwork returns to its normal size.

② **Category tabs**
Shows the list to narrow down the songs. If you want to use the list of "**Audiobooks**", "**Composers**" or "**Songs**", touch [**MENU**] to display the lists.

③ **Display the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on page 144.

④ **Switch the operation screen**
Touching this key switches between the screen to operate music files and the screen to operate video files. After you touch the key, the top category menu appears to let you select the item for playback.
❐ This touch panel key is available only when there are both audio and video file in your iPod.
❐ If iPod fifth generation is connected, the following settings are automatically changed when the operation screen is switched to the screen to operate video files.
- [**Repeat**] is set to [**All**].
- [**Shuffle**] is set to [**Off**].

⑤ **Display the top category menu**
Touching the key displays the top category before you use the category tabs. If you select the song using the category tabs to play, touching the key displays the previous list.

⑥ **Skip back or forward to another song**
Touching [▶▶|] skips to the start of the next song. Touching [|◀◀] once skips to the start of the current song. Touching again will skip to the previous song. When the track with chapters played, chapter can be skipped back and forward.
Fast reverse or forward
Touch and hold [|◀◀] or [▶▶|] to fast reverse or fast forward.
❐ You can also perform these operations by using the **TRK** (◀/▶) button.

⑦ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

⑧ **Shuffle All**
All songs (except for the track in "**Audiobooks**" and "**Podcasts**") in your iPod can be played randomly.
❐ To cancel the random play, switch [**Shuffle**] on the "**Function**" menu to the "**Off**".

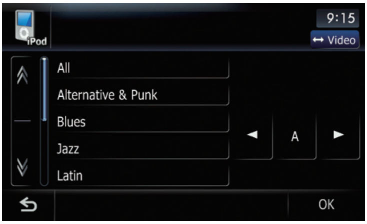
Browsing for a song

Touch an item on list to search for a song and play it on your iPod.

Narrowing down listed songs

1 Touch your desired category tab to display the song or track list.
- **Playlists** (playlists)
- **Genres** (genres)
- **Artists** (artists)
- **Albums** (albums)
- **Podcasts** (podcasts)

The search screen is displayed.



2 Touching ︽ or ︾ switches the selection to the next or previous page in the list.

3 Touch the item that you want to refine.
Refine the item until the track title is displayed on the list.

- ❐ Touching [**All**] on the list includes all options in the current list. For example, if you touch [**All**] after touching [**Artists**], you can proceed to the next screen with all artists in the list selected.
- ❐ After you select **Artists**, **Albums**, or **Genres**, go on to touch one of the list to start playing the first songs in the selected list and display the next options.

■ Touch and hold the item that you want to refine.
Plays back the files related to the touched item.

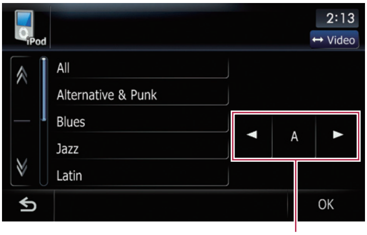
4 On the song (or episode) list, touch the track you want to play.

- ❐ After you select the track using this function, touching [**MENU**] displays the list previously selected.

Searching for applicable items alphabetically

Using the search control displays the page which includes the first applicable option.

- ❐ This function is available for the alphabetical list only.



Search control

1 Touch your desired category tab to display the list.

2 Touch the item that you want to refine.

3 Touch [◄] or [►] to select the character.

- ❐ An article listed below and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
  - — “A” or “a”
  - — “AN”, “An”, or “an”
  - — “THE”, “The”, or “the”

4 Touch the character key to display the page which includes applicable options.

5 On the song (or episode) list, touch the track you want to play. ■

Operating this navigation system's iPod function from your iPod

This navigation system’s iPod function can be operated from your iPod. Sound can be heard from the car’s speakers, and operation can be conducted from your iPod.
This function can be operated with the following iPod models:
Even if [**Change Control Mode**] is set to [**iPod**], following functions are available from this navigation system.

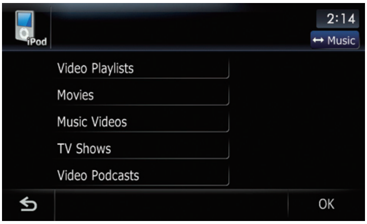
- Playback and Pause
- Fast reverse or forward
- Skip forward or backward
- Adjusting the volume ■

Starting the video playback

This navigation system can play video if an iPod with video capabilities is connected.

1 Touch [Video].

2 Touch one of the categories in that contains the video you want to play.



Video playback will start.

3 Touch your desired item on the list to narrow down them until the video list appears.

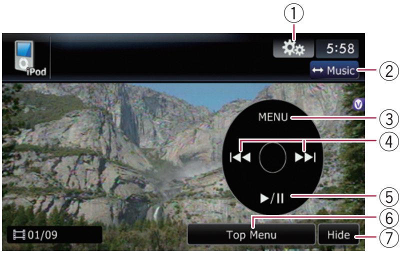
➲ For details concerning operations, refer to *Browsing for a video* on the next page.

4 On the video list, touch the video you want to play.

5 Touch the screen to display the touch panel keys.

➲ For more details of the operation, refer to *Using the touch panel keys* (**Video**) on this page. ■

Using the touch panel keys (Video)



① **Display the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on the next page.

② **Switch the operation screen**
Touching this key switches between the screen to operate music files and the screen to operate video files. After you touch the key, the top category menu appears to let you select the item for playback.
❒ This touch panel key is available only when there are both audio and video file in your iPod.

③ **Display the previous selected list**
If you select the video from the list to play after touching **Top Menu**, touching the key displays the previous list.

④ **Skip back or forward to another song**
Touching [⏭] skips to the start of the next video. Touching [⏮] once skips to the start of the current video. Touching again will skip to the previous video. When the video with chapters played, chapter can be skipped back and forward.
Fast reverse or forward
Touch and hold [⏮] or [⏭] to fast reverse or fast forward.
If you touch and hold [⏮] or [⏭] for five seconds, fast reverse/fast forward continues even if you release either of these keys. To resume playback at a desired point, touch [▶/II], [⏮] or [⏭].
❒ You can also perform these operations by using the **TRK** (◀/▶) button.

⑤ **Playback and Pause**
Touching [▶/II] switches between playback and pause.

⑥ **Display the top category menu for video**
Touching the key displays the top category for video playback.

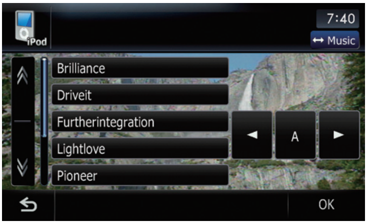
⑦ **Hide the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again.

Browsing for a video

Touching the item on list allows you to search for a video and play it in your iPod.

Narrowing down a video with the list

1 Touch [MENU] or [Top Menu].
The search screen is displayed.



2 Touch the category you want.

3 Touching ∧ or ∨ switches the selection to the next or previous page in the list.

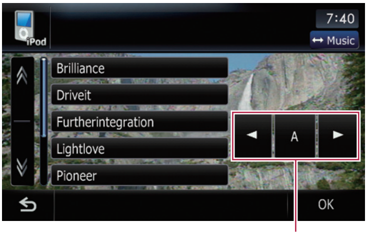
4 Touch the item that you want to refine.
Refine the item until the track title is displayed on the list.

5 On the video list, touch the video you want to play.
❒ After you select the video using this function, touching [**MENU**] displays the list previously selected.

Searching for applicable items alphabetically

Using the search control displays the page which includes the first applicable option.

❒ This function is available for the alphabetical list only.


iPod
7:40
↔ Music
Brilliance
Driveit
Furtherintegration
Lightlove
Pioneer
◄
A
►
OK

Search control

1 Touch the category you want.

2 Touch the item that you want to refine.

3 Touch [◄] or [►] to select the character.

❒ An article listed below and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
— “A” or “a”
— “AN”, “An”, or “an”
— “THE”, “The”, or “the”

4 Touch the character key to display the page which includes applicable options.

5 On the video list, touch the video you want to play. ■

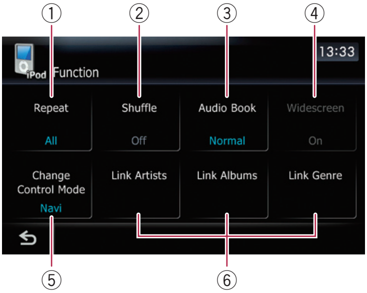
Using the “Function” menu

❒ If [**Change Control Mode**] is set to [**iPod**], only the setting of [**Change Control Mode**] is available.

1 Touch [iPod] on the “AV Source” menu to display the control screen for “iPod”.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.


①
②
③
④
iPod
Function
13:33
Repeat
All
Shuffle
Off
Audio Book
Normal
Widescreen
On
Change Control Mode
Navi
Link Artists
Link Albums
Link Genre
⑤
⑥

① **Setting repeat play**
There are two repeat play types for playback.
Each touch of [**Repeat**] changes the setting as follows:

- **One** — Repeats just the current track
- **All** — Repeats all tracks in the selected list

② **Setting the shuffle play for music**
This function shuffles songs or albums and plays them in random order.
Each touch of [**Shuffle**] changes the setting as follows:

- **Off** — Does not shuffle.
- **Songs** — Plays back songs in random order within the selected list
- **Albums** — Selects an album randomly, and then plays back all songs in that album in order

③ **Setting the audiobook play speed**
While listening to an audiobook on iPod, playback speed can be changed.
Each touch of [**Audio Book**] changes the setting as follows:

- **Normal** — Playback in normal speed
- **Faster** — Playback faster than normal speed
- **Slower** — Playback slower than normal speed

④ **Playback video in wide screen mode**
If the video is compatible with wide screen format, set [**Widescreen**] to [**On**] in order to view the video image in the wide screen.
Each touch of [**Widescreen**] changes the setting as follows:

- **On** — Outputs the wide-screen video from iPod
- **Off** — Outputs the normal-sized video from iPod

❒ Display size is changed after you change “**Widescreen**” setting and select the video to play.

❒ This setting is available only during the video operation.

⑤ **Setting iPod control mode**

While the control mode is set to “**iPod**”, you can operate iPod function from the connected iPod.

Each touch of [**Change Control Mode**] changes the setting as follows:

- **Navi** — This navigation system’s iPod function can be operated from this navigation system.
- **iPod** — This navigation system’s iPod function can be operated from the connected iPod.

⑥ **Playing songs related to the currently playing song**

Songs related to the currently playing song are played. You can play songs of the following lists.

- Artist list of currently playing genre
- Album list of currently playing artist
- Song list of currently playing album

❒ This setting is available only during the music operation.

❒ Depending on the number of files in the iPod, there may be a delay when displaying a list.

- **Link Artists** — Songs related to the currently playing artist will be played.
- **Link Albums** — Songs related to the currently playing album will be played.
- **Link Genre** — Songs related to the currently playing genre will be played. ■

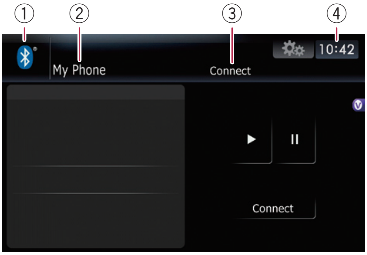
You can control the Bluetooth audio player featuring Bluetooth wireless technology.

- ❐ Before using the Bluetooth audio player, you need to register and connect the device to this navigation system.
  - ➲ For more details of the operation, refer to Chapter 11.
- ❐ Depending on the Bluetooth audio player connected to this navigation system, the available operations with this navigation system are limited to the following two levels:
  - — A2DP profile (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
  - — AVRCP profile (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- ❐ Since there are a number of Bluetooth audio players available on the market, operations with your Bluetooth audio player using this navigation system vary greatly in range. Please refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this navigation system.
- ❐ While you are listening to songs on your Bluetooth audio player, please refrain from operating your cellular phone as much as possible. If you try operating on your cellular phone, the signal from your cellular phone may cause a noise on the song playback.
- ❐ Even if you switch to another source while listening to a song on your Bluetooth audio player, the playback of song continues to elapse.
- ❐ Depending on the Bluetooth audio player you connected to this navigation system, operations on this navigation system to control the player may differ from those explained in this manual.
- ❐ When you are talking on a cellular phone connected to this unit via Bluetooth wireless technology, song playback from your Bluetooth audio player connected to this unit is paused.

● **Touch [Bluetooth Audio] on the “AV Source” menu to display the “Bluetooth Audio” screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

Reading the screen



① **Source icon**
Shows which source has been selected.

② **Device name**

③ **Bluetooth connection status indicator**

④ **Current time**

If the connected Bluetooth audio player features AVRCP 1.3, the following items will be displayed.

- **Track number indicator**
- **Play time indicator**
  Shows the elapsed playing time within the current track.
- **Track title indicator**
  Shows the title of the track currently playing (when available).
- **Artist name indicator**
  Shows the artist name currently playing (when available).
- **Album title indicator**
  Shows the title of the album for the current track (when available).
- **Playback condition indicator**
  The marks shown below appears and indicates the current playback condition (when available).

  🔀: Random play

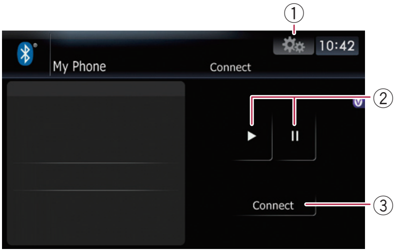
  🔁: Repeat play

Indicator	Meaning
All Repeat	All audio files in the current Bluetooth audio player are played repeatedly. This is the default condition.
All Repeat Random	
Track Repeat	The current file is played repeatedly.
Track Repeat Random	
Random	All audio files in the current Bluetooth audio player are played in random order.

➲ For more information, refer to *Using the “***Function***” menu* on this page.

❐ In the following cases, track information will only be displayed after a track starts or resumes playing:
— You connect the Bluetooth audio player compatible with AVRCP1.3, and operate the player to start playing.
— You select another track when playback is paused. ■

Using the touch panel keys



① **Display the “Function” menu**
➲ For details, refer to *Using the “***Function***” menu* on this page.

② **Playback and Pause**
Touching [▶] or [❚❚] switches between playback and pause.

③ **Connect the Bluetooth audio player**
Touching [**Connect**] connects the Bluetooth audio player manually. ■

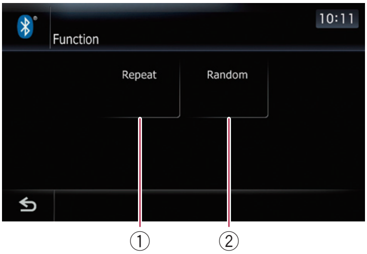
Using the “Function” menu

❐ This menu is available only when the connected Bluetooth audio player features AVRCP 1.3.

1 Touch [Bluetooth Audio] on the “AV Source” menu to display the “Bluetooth Audio” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.



① **Repeating play**
Each touch of [**Repeat**] changes the setting as follows:
- **All** — Repeats all compressed audio files in the Bluetooth audio player
- **Track** — Repeats just the current track
- **Off** — Does not repeat.

❐ If you skip the file forward or backward when the repeat play range in “**Track**”, the repeat play range changes to “**All**”.

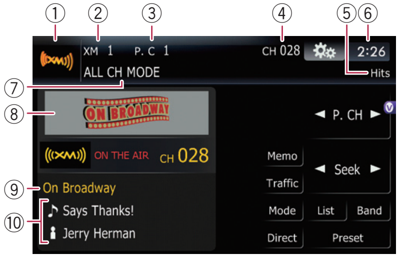
② **Play tracks in a random order**
Random play lets you playback tracks in random order within the current repeat range.
Touching [**Random**] switches between “**On**” and “**Off**”. ■

You can use the navigation system to control an XM satellite digital tuner, which is sold separately.
For details concerning operation, refer to the XM tuner's operation manuals. This section provides information on XM operations with the navigation system which differs from that described in the XM tuner's operation manual.

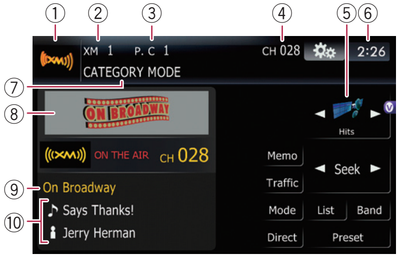
> The following XM satellite digital tuner units cannot be connected:
> GEX-P900XM, GEX-P910XM

Reading the screen

ALL CH MODE


①
②
③
④
⑤⑥
⑦
⑧
⑨
⑩
XM 1
P. C 1
ALL CH MODE
CH 028
2:26
Hits
ON BROADWAY
ON THE AIR
CH 028
On Broadway
Says Thanks!
Jerry Herman
P. CH
Memo
Seek
Traffic
Mode
List
Band
Direct
Preset

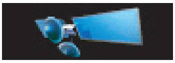
CATEGORY MODE


①
②
③
④
⑤⑥
⑦
⑧
⑨
⑩
XM 1
P. C 1
CATEGORY MODE
CH 028
2:26
Hits
ON BROADWAY
ON THE AIR
CH 028
On Broadway
Says Thanks!
Jerry Herman
Memo
Seek
Traffic
Mode
List
Band
Direct
Preset

About the logo for channel name

Only the logo data that is contained in the navigation system can be displayed for each channel. The logo of a newly established channel that is not contained cannot be displayed. When a logo is not available, the following substitute icon is displayed.

Substitute icon



- The icon of each broadcast station is contained in the NAND flash memory based on the data provided by XM Satellite Radio as of March 2009.
- Any changes made by XM Satellite Radio in the lineup or icon of the broadcast station in the future may not be supported by the navigation system, and may cause the unit to display incorrect icons.

① **Source icon**
Shows which source has been selected.

② **XM band indicator**
Shows the XM band that has been selected.

③ **Preset number indicator**
Shows what preset item has been selected.

④ **XM channel number indicator**
Shows the XM channel number the tuner is currently tuned to.

⑤ **XM channel category**
Shows the category of broadcast channel.

⑥ **Current time**

⑦ **XM channel select mode indicator**
Shows what channel select mode has been selected. You can select a channel from all channels in **ALL CH MODE**, and select a channel from selected category in **CATEGORY MODE**.

⑧ **XM station name logo**
- The message “**ON THE AIR**” disappears if the navigation system cannot receive XM tuner reception for some reason.

⑨ **XM station name indicator**
Shows the XM broadcast station name the tuner is currently tuned in.

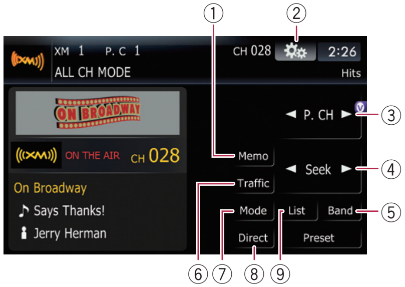
⑩ **Detail information**
Shows the detailed information of the broadcast channel currently being received. ■

Using the touch panel keys

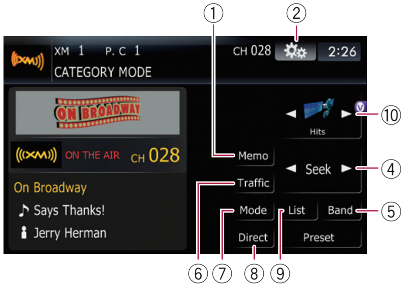
● **Touch [XM] on the "AV Source" menu to display the "XM" screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

ALL CH MODE


①
②
XM 1 P. C 1
ALL CH MODE
CH 028
2:26
Hits
ON BROADWAY
ON THE AIR
CH 028
On Broadway
Says Thanks!
Jerry Herman
P. CH
③
Memo
Seek
④
Traffic
Mode
List
Band
⑤
Direct
Preset
⑥ ⑦ ⑧ ⑨

CATEGORY MODE


①
②
XM 1 P. C 1
CATEGORY MODE
CH 028
2:26
ON BROADWAY
ON THE AIR
CH 028
On Broadway
Says Thanks!
Jerry Herman
Hits
⑩
Memo
Seek
④
Traffic
Mode
List
Band
⑤
Direct
Preset
⑥ ⑦ ⑧ ⑨

① **Memorize the current song**
➲ For details, refer to *Memorizing the song* on the next page.

② **Display the "Function" menu**
➲ For details, refer to *Using the "***Function***" menu* on page 151.

③ **Recalling channels from the preset**
Touch to recall the preset channel.

④ **Perform manual tuning**
The channels move up or down one at a time.
❒ If you keep touching [◀] or [▶] you can skip the broadcasting channels.

⑤ **Select an XM band**
Touch [**Band**] repeatedly until the desired XM band is displayed: **XM 1**, **XM 2** or **XM 3**. This is useful for switching the preset item.

⑥ **Preset key for receiving the traffic audio service**
➲ For details, refer to *Using the direct traffic announcement function* on page 151.

⑦ **Switching the XM channel select mode**
You can switch the mode between the two methods for selecting and listing the channel.
ALL CH MODE:
You can select a channel from all channels when you operate this function.
CATEGORY MODE:
You can select a channel within a selected category that you operate this function.

⑧ **Selecting an XM channel directly**
➲ For details, refer to *Selecting an XM channel directly* on this page.

⑨ **Switching to the list display**
You can select the desired channel from the list display.
➲ For details, refer to *Selecting a channel from the list* on the next page.

⑩ **Switching the channel category**
Touch [◀] or [▶] to select the desired category.

Selecting an XM channel directly

You can select an XM channel directly by entering the desired channel number.

1 Touch [Direct].

2 Touch [0] to [9] to input the desired channel number.

To cancel the input numbers, touch ⌫.

3 While the input number is displayed, touch [Enter].

The XM channel that was entered is selected.

4 Touch ↩.

You return to the previous display.

Displaying the Radio ID

If you select CH: 000, the Radio ID is displayed.

1 Touch [Direct].

2 Input [000] and then touch [Enter].

If you select another channel, display of the Radio ID is canceled.

Storing and recalling broadcast stations

With a touch of any of the preset tuning keys ([**P1**] to [**P6**]), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

1 Select the channel that you want to store in memory.

2 Touch [Preset] to display the preset list.

3 Keep touching a preset tuning key [P1] to [P6].

The selected station has been stored in memory.

The next time you touch the same preset tuning key [**P1**] to [**P6**], the station is recalled from memory.

- ❒ Up to 18 stations, six for each of three XM bands can be stored in memory.
- ❒ You can also touch [◀] or [▶] to recall stations assigned to preset tuning keys [**P1**] to [**P6**] in the detailed information display during the "**ALL CH MODE**".

Selecting a channel from the list

The list content can be switched so you can search for the song you want to listen to not only by the channel name but also by the artist name or song title.

- ❒ The channel list shows all channels during **ALL CH MODE**, and the channels included in the selected category during **CATEGORY MODE**. To switch the channel mode, touch [**Mode**].

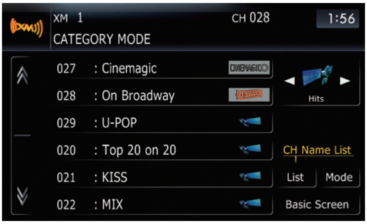
1 Touch [List].

XM channel list appears in the display.

Each touch of [**List**] changes the screen as follows:

Detail information display or Preset list display — **CH Name List** (Channel name) — **Song Title List** (Song title) — **Artist Name List** (Artist name)

2 Touch the desired channel that you want to listen to.



Touch ︽ or ︾ to switch to the next page or previous page.

- ❒ During **CATEGORY MODE**, touch [◀] or [▶] to switch to another category.

Using "My Mix" function

"My Mix" function memorizes the song title and artist name of the song currently being received. When the song that matches the memorized song title and artist name is being broadcast on a station other than the one you are listening to, you will be alerted, and you can switch the station to listen to that song.

- ❒ A track itself is NOT downloaded. ONLY the song title and the artist name are memorized.

Memorizing the song

The song title and artist name of the song you are listening to can be memorized to "My Mix".

- **Touch and hold [Memo].**

The song title and artist name of current song you are listening to are memorized, and a confirmation message appears.

- ❒ The song title and artist name of up to 12 songs can be memorized. Trying to save more than 12 songs will result in older ones being overwritten.
- ❒ You cannot memorize the song title or the artist name when "– – – – – – – –" is displayed on the title information.
- ❒ This function is invalid for the channel "000".
- ❒ The memorized title may not be displayed correctly depending on the conditions.

❒ You can customize the setting for the memorized songs later.
  ➲ For more details concerning the operation, refer to *Setting the memorized songs* on the next page.

When the memorized song is broadcast

A beep sounds, and a message is displayed. Touch [**Yes**] to switch to that station and listen to that track.

❒ If the memorized song is not checked or when [**Off**] is selected on [**Alert**] on "**Memo Edit**" screen, no alert will be provided.
  ➲ Refer to *Setting the memorized songs* on the next page.

❒ Notification may not be provided depending on the status of the navigation system.

❒ If there is even a slight difference between the memorized title and the title of the song being broadcast, no notification will be provided even though they are the same song.

Using the direct traffic announcement function

You can listen to the memorized "Instant Traffic & Weather" channel by directly calling it up with [**Traffic**]. (Only one station can be memorized.)

Memorizing an "Instant Traffic & Weather" channel

1 Tune into "Instant Traffic & Weather" channel.

2 Touch and hold [Traffic] for two seconds or more.

That "Instant Traffic & Weather" channel will be memorized.

❒ Even if you use the SiriusConnect universal tuner together, only one station can be memorized. The station memorized afterward will overwrite the existing one.

Tuning in to the memorized channel

● **Touch [Traffic].**

❒ You can also perform this operation by touching [**Traffic**] on the "**AV Source**" menu.

❒ You can even call up a "Instant Traffic & Weather" channel from a source other than the XM source.

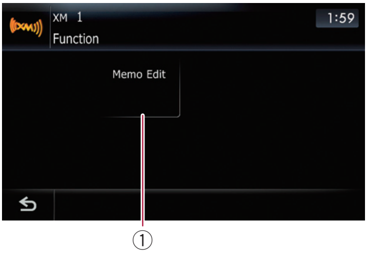
❒ To cancel the announcement, touch [**TRFC Off**] on the screen. ■

Using the "Function" menu

1 Touch [XM] on the "AV Source" menu to display the "XM" screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.



① **Setting the memorized songs**

Setting the memorized songs

Selecting the songs to alert

The list of song titles memorized for the MyMix Function (MyMix list) is displayed. You can change the notification setting when the song is broadcast again. You can enable or disable notification for each song.

1 Touch [Memo Edit].

2 Touch the song title that you want to disable notification for.
The check mark is removed, and the notification setting of the song is deactivated.

Changing the alert setting

You can enable or disable alerts for all items at the same time. This function is useful when you want to turn alerts off temporarily without changing each memorized song.

1 Touch [Memo Edit].

2 Touch [Alert].
Touch to toggle the selection.

Deleting the memorized songs

You can delete each one of the memorized songs from the song title list.

1 Touch [Memo Edit].

2 Touch and hold the song you want to delete.

- ❐ To delete all songs that are memorized, touch [**Delete All**].

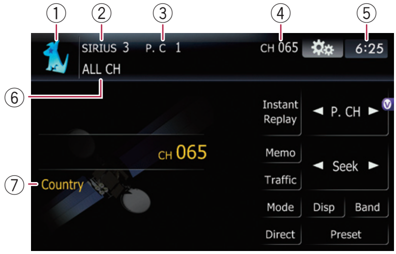
3 Touch [Yes]. ■

You can use the navigation system to control a Pioneer Sirius Satellite Radio tuner, which is sold separately.
For details concerning operation, refer to the SIRIUS tuner's operation manuals. This section provides information on SIRIUS operations with navigation system which differs from that described in the SIRIUS tuner's operation manual.

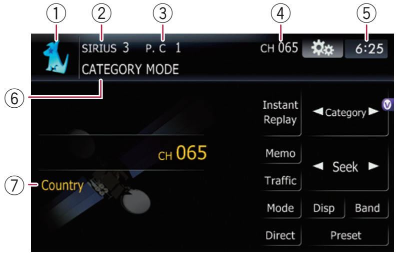
❒ When you use the SiriusConnect universal tuner (sold separately) with this navigation system, Pioneer SIRIUS BUS INTERFACE is required. For details concerning operation, refer to the owner's manual of Pioneer SIRIUS BUS INTERFACE and SiriusConnect universal tuner.

Reading the screen

ALL CH MODE


①
②
③
④
⑤
⑥
⑦
SIRIUS 3
P. C 1
CH 065
6:25
ALL CH
Instant Replay
P. CH
CH 065
Memo
Seek
Country
Traffic
Mode
Disp
Band
Direct
Preset

CATEGORY MODE


①
②
③
④
⑤
⑥
⑦
SIRIUS 3
P. C 1
CH 065
6:25
CATEGORY MODE
Instant Replay
Category
CH 065
Memo
Seek
Country
Traffic
Mode
Disp
Band
Direct
Preset

① **Source icon**
Shows which source has been selected.

② **SIRIUS band indicator**
Shows the SIRIUS band that has been selected.

③ **Preset number indicator**
Shows what preset item has been selected.

④ **SIRIUS channel number indicator**
Shows the SIRIUS channel number that the tuner is tuned to.

⑤ **Current time**

⑥ **SIRIUS channel select mode indicator**
Shows what channel select mode has been selected. You can select a channel from all channels in **ALL CH MODE**, and select a channel from the selected category in **CATEGORY MODE**.
➲ For details, refer to ***Switch the SIRIUS channel select mode*** on the next page.

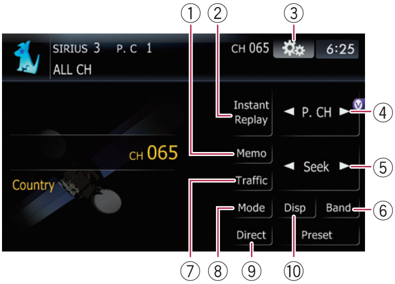
⑦ **Variable information area**
Shows various information about the broadcast channel currently being received.
➲ For more details about the displayed information, refer to ***Switch the SIRIUS display*** on the next page. ■

Using the touch panel keys

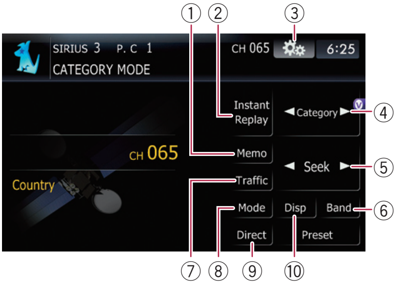
● **Touch [SIRIUS] on the "AV Source" menu to display the "SIRIUS" screen.**

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

ALL CH MODE


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
SIRIUS 3
P. C 1
CH 065
6:25
ALL CH
Instant Replay
P. CH
CH 065
Memo
Seek
Country
Traffic
Mode
Disp
Band
Direct
Preset

CATEGORY MODE



① **Memorize the current song**
- ➲ For details, refer to *Memorizing the song* on the next page.

② **Switch the SIRIUS Instant replay mode**
- ➲ For details, refer to *Using the "***Instant Replay***" function* on page 156.

③ **Display the "Function" menu**
- ➲ For details, refer to *Using the "***Function***" menu* on page 156.

④ **Recalling channels from the preset**
Touch to recall the preset channel.

⑤ **Perform manual tuning**
The channels move up or down one at a time.
- ❒ If you keep touching [◀] or [▶] you can skip the broadcasting channels.

⑥ **Select a SIRIUS band**
Touch [**Band**] repeatedly until the desired SIRIUS band is displayed, **SIRIUS 1**, **SIRIUS 2**, or **SIRIUS 3**. This is useful for switching the preset.

⑦ **Preset key for receiving the traffic audio service**
- ➲ For details, refer to *Using the direct traffic announcement function* on the next page.

⑧ **Switch the SIRIUS channel select mode**
You can switch the mode between the two methods for selecting and listing the channel.
ALL CH MODE:
You can select a channel from all channels when you operate this function.
CATEGORY MODE:
You can select a channel within a selected category that you operate this function.

⑨ **Select a SIRIUS channel directly**
- ➲ For details, refer to *Selecting a SIRIUS channel directly* on this page.

⑩ **Switch the SIRIUS display**
Each touch of [**Disp**] changes the display information.
Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer

⑪ **Switch the channel category**
Touch [◀] or [▶] to select the desired category.

Selecting a SIRIUS channel directly

You can select a SIRIUS channel directly by entering the desired channel number.

1 Touch [Direct].

2 Touch [0] to [9] to input the desired channel number.

To cancel the input numbers, touch ◀.

3 While the input number is displayed, touch [Enter].

The SIRIUS channel that was entered selected.

4 Touch ↩.

You return to the previous display.

Display the Radio ID

If you select CH: 000, the Radio ID is displayed.

1 Touch [Direct].

2 Input [000] and then touch [Enter].

If you select another channel, display of the Radio ID is canceled.

Storing and recalling broadcast stations

With a touch of any of the preset tuning keys [**Preset 1**] to [**Preset 6**], you can easily store up to six broadcast stations for later recall (also with the touch of a key).

1 Select the channel that you want to store in memory.

2 Touch [Preset] to display the preset list.

3 Keep touching a preset tuning key [P1] to [P6].
The selected station has been stored in memory.
The next time you touch the same preset tuning key [**Preset 1**] to [**Preset 6**] the station is recalled from memory.

- ❐ Up to 18 stations, six for each of three SIRIUS bands can be stored in memory.
- ❐ You can also touch [◀] or [▶] to recall stations assigned to preset tuning keys [**Preset 1**] to [**Preset 6**] in the detailed information display during "**ALL CH MODE**".

Using "My Mix" function

The MyMix function memorizes the song title and artist name of the song currently being received. When a track that matches the memorized song title and artist name is being broadcast on a station other than the one you are listening to, you will be alerted, and you can switch the station to listen to that song.

- ❐ The track itself is NOT downloaded; only the song title and the artist name are memorized.

Memorizing the song

The song title and artist name of the song you are listening to can be memorized.

- **Touch and hold [Memo].**

The song title and artist name of the song you are listening to are memorized, and [**Song and artist have been saved.**] is displayed.

- ❐ Up to 10 song titles and artist names can be memorized.
- ❐ You cannot memorize a song that does not have song title and artist name information.
- ❐ You cannot memorize the song title or the artist name of channel "000".
- ❐ The memorized title may not be displayed correctly.

When the memorized song is broadcast

A beep sounds, and a message is displayed. Touch [**Jump**] to switch to that station, and you can listen to that track. If you touch [**Stay**], the channel does not switch.

- ❐ If the alert for the song is "**Off**" or set [**Alert**] to [**Off**], no notification will be provided even when that song is broadcast.
  - ➲ For details, refer to ***Setting the memorized songs*** on the next page.
- ❐ Notification may not be provided depending on the situation of the Navigation System.
  - ➲ For details, refer to *Selecting the songs to alert* on the next page.

Using the direct traffic announcement function

You can listen to a memorized traffic channel by directly calling it up with the [**Traffic**] (Only one station can be memorized).

Memorizing an traffic channel

1 Tune in to a traffic channel.

2 Touch and hold [Traffic] for two seconds or more.
The traffic channel will be memorized.

- ❐ Even if you use this with the XM satellite digital tuner, only one station can be memorized. The station memorized afterward will overwrite the existing one.
- ❐ The channels 000 can not be memorized.

Tuning in to the memorized channel

- **Touch [Traffic].**
  - ❐ You can also perform this operation by touching [**Traffic**] on the "**AV Source**" menu.
  - ❐ To cancel a traffic announcement, touch [**TRFC Off**].

Using the “Instant Replay” function

The “**Instant Replay**” function allows you to replay the stored broadcast on Pioneer SIRIUS BUS INTERFACE (if Pioneer SIRIUS BUS INTERFACE capable for this function). As soon as you tune to a channel, Pioneer SIRIUS BUS INTERFACE automatically begins storing the broadcast. It can store approximately up to 44 minutes previous (depending on the selected channel and the memory capacity of Pioneer SIRIUS BUS INTERFACE).

1 Touch [Instant Replay] on the SIRIUS screen to activate the “Instant Replay” mode.

2 Touch keys for “Instant Replay”.

[⏮]	Return to the start of the current song or program. Touching again will skip back to the previous song or program.
[⏮] and hold	Fast reverses.
[⏭]	Forwards play to the next song or program.
[⏭] and hold	Fast-forwards.
[▶/❚❚]	Touching [▶/❚❚] switches between playback and pause.

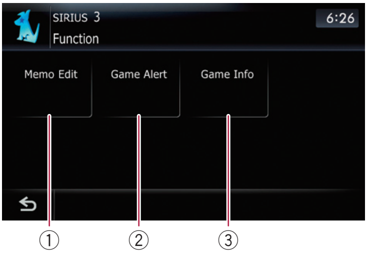
- ❒ During “**Instant Replay**” mode, each touch of [**Disp**] changes the display information as follows;
  Time position — Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer
- ❒ You cannot replay the broadcast prior to the beginning of stored data. ■

Using the “Function” menu

1 Touch [SIRIUS] on the “AV Source” menu to display the “SIRIUS” screen.

➲ For details concerning operations, refer to *Screen switching overview* on page 36.

2 Touch ⚙.



① **Setting the memorized songs**
➲ For details, refer to this page.
② **Using the Game Alert function**
➲ For details, refer to the next page.
③ **Displaying Game Information**
➲ For details, refer to the next page.

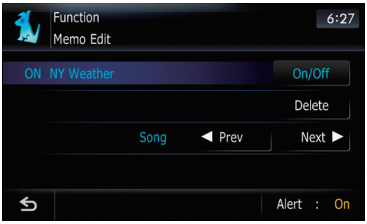
Setting the memorized songs

Selecting the songs to alert

You can change the setting of the alert when the track is broadcast again. You can enable or disable alert for each song.

1 Touch [Memo Edit].

2 Touch [◀ Prev] or [Next ▶] to select the desired song.



3 Touch [On/Off] to turn the setting on.

When the alert for the song is activated, [**On**] appears at the beginning of the selected title.

- ❒ Touch [**On/Off**] again to turn the setting off.

Changing the alert setting

You can enable or disable alerts for all items at the same time. This function is useful when you want to turn alerts off temporarily without changing each memorized song.

1 Touch [Memo Edit].

2 Touch [Alert].

- Touch to toggle the selection.

Deleting the memorized songs

You can delete each one of the memorized tracks from the song title list.

1 Touch [Memo Edit].

2 Touch [◀ Prev] or [Next ▶] to select the song title that you want to delete.

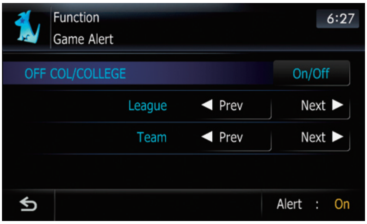
3 Touch [Delete] when the song you want to delete is displayed.
A message will appear asking you to confirm the deletion.

4 Touch [Yes].

Using the Game Alert function

Selecting teams for Game Alert

This navigation system can alert you when games involving your favorite sports teams are about to start. To use this function you need to store the teams you want to follow in advance.



1 Touch [Game Alert].

2 Touch [◀ Prev] or [Next ▶] to select the league.

3 Touch [◀ Prev] or [Next ▶] to select the team.

4 Touch [On/Off].
The team displayed as [**On**] is the alert target.

- When the selected team is excluded from the alert target, the team is displayed as [**Off**]. Up to 12 teams can be selected. When you have already made 12 team selections, "**FULL**" is displayed and additional team selection is not possible. In this case, first delete the team selection and then try again.

Changing the alert setting

You can enable or disable the alert for selected items. This function is useful when you want to turn the alert off temporarily without changing the setting of each selected team.

1 Touch [Game Alert].

2 Touch [Alert].

- Touch to toggle the selection.

When a game involving one of your teams is broadcast

A message is displayed. Touch [**Jump**] to switch the station, and you can view the game information. If you touch [**Stay**], the channel does not switch.

- Alerts may not be provided depending on the status of the navigation system.

Displaying Game Information

An alert will be displayed when a game with the team you selected is about to start (or is currently under way). You can also display game information and changes to the broadcast channel.

- The Game Information function is available when [**Alert**] is [**On**] in "**Game Alert**".

1 Touch [Game Info].

2 Touch [Prev] or [Next] to view the game score information which is registered.

- The game score will be updated automatically.
- Touch [**Tune To**] to switch to the channel that broadcasts the displayed game.
- If you have not made any team selections, "**Not Set**" is displayed.
- When no games involving your favorite teams are currently being played "**NO GAME**" is displayed. ■

You can display “video image” output by **AV1 Input** or **AV2 Input** to the screen of the navigation system. For details of the connection method, refer to “Installation Manual”.

CAUTION
For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, you must stop in a safe place and apply the parking brake.

Using AV1

You can display “video image” output by the equipment connected to “**AV1 Input**”.

1 Touch [AV1 Input] on the “AV System Settings” menu.
- ➲ For details, refer to *Setting video input 1 (***AV1***)* on page 162.

2 Touch [AV1] on the “AV Source” menu.
The image is displayed on the screen.
- ➲ For details concerning operations, refer to *Screen switching overview* on page 36. ■

Using AV2

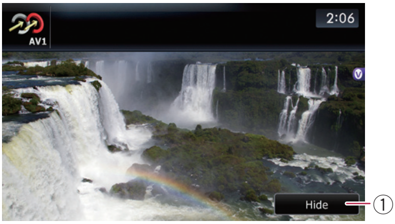
You can display “video image” output by the equipment connected to “**AV2 Input**”.

1 Touch [AV2 Input] on the “AV System Settings” menu.
- ➲ For details, refer to *Setting video input 2 (***AV2***)* on page 162.

2 Touch [AV2] on the “AV Source” menu.
The image is displayed on the screen.
- ➲ For details concerning operations, refer to *Screen switching overview* on page 36. ■

Using the touch panel keys

● **Touch the screen to display the touch panel keys.**

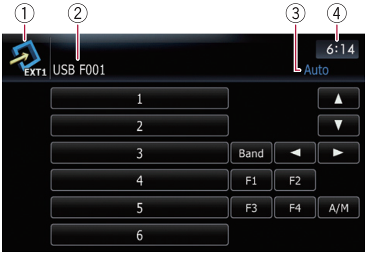


① **Hide the touch panel keys**
Touching [**Hide**] hides the touch panel keys. Touch anywhere on the LCD screen to display the touch panel keys again. ■

The term “external unit” refers to future Pioneer devices that are not currently planned for, or to devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them as external unit 1 or external unit 2.
For details of the connection method, refer to the Installation Manual.
For details concerning operation, refer to the external unit’s operation manual. This section provides information on external unit operations with the navigation system that differ from those described in the external unit’s operation manual.

❐ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

Reading the screen



① **Source icon**
Shows which source has been selected.

② **External unit indicator**
Displays the information that is sent by connected external units.

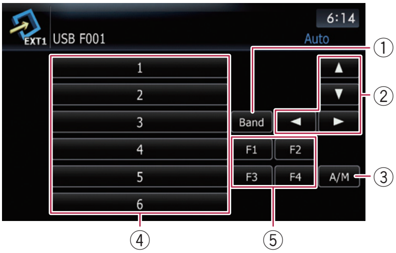
③ **Auto/Manual mode indicator**
Shows the current mode.

④ **Current time** ■

Using the touch panel keys

- **Touch [EXT1] or [EXT2] on the “AV Source” menu to select the external unit.**

  ➲ For details concerning operations, refer to *Screen switching overview* on page 36.



① **Send a band command**
Touch to send a band command to the external unit.

❐ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

② **Send an [▲], [▼], [◀], or [▶] command**
Touch to operate the external unit.

❐ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

③ **Switching between automatic and manual function**
You can turn automatic and manual function on or off.
You can switch between **Auto** and **Manual** functions of the external unit connected.
Initially, this function is set to **Auto**.

❐ Operating commands set for **Auto** and **Manual** operations vary depending on the external unit connected.

④ **Send a 1 key to 6 key command**
The external unit can be operated by transmitting the operating commands set to **1** key — **6** key.

❐ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

⑤ **Use F1 — F4 to operate the external unit**
The external unit can be operated by transmitting the operating commands set to **F1** — **F4**.

❐ The operating commands set to **F1** — **F4** vary depending on the external unit.

❐ Some functions may not be used until you touch and hold the key. ■

Selecting the video for "Rear display"

You can choose either to show the same image as the front screen or to show the selected source on the "Rear display".

● **Touch [Rear Screen] on the "AV Source" menu.**

Each touch of [**Rear Screen**] changes the settings as follows:

- **Mirror AV** — The video on the front screen of the navigation unit is output to the "Rear display"
- **iPod** — The video and sound of the iPod are output to the "Rear display"
- **Disc** — The video and sound of the DVDs are output to the "Rear display"
- **AV1** — The video and sound of **AV1** are output to the "Rear display"
- **AV2** — The video and sound of **AV2** are output to the "Rear display"

❒ When [**Mirror AV**] is selected, the following restrictions are applied to "Rear display".
  — When selecting [**Rear View**] in the map display, nothing is displayed.
  — All sounds cannot be output for "Rear display".
  — When playing back video files on the external storage device (USB, SD), the "Video image" is not output.

❒ When **Disc** is selected, the following restrictions are applied to "Rear display".
  — When a CD or MP3/WMA/AAC disc is set in the built-in DVD drive, only the sound is output.

❒ When **iPod** is selected, the following restrictions are applied to "Rear display".
  — The "Video image" and sound are output only when the appropriate setting on [**AV1 Input**] is [**iPod**].

❒ When **AV** is selected, the following restrictions are applied to "Rear display".
  — The "Video image" and sound are output only when **AV1**/**AV2** has both video and sound.
  — The "Video image" and sound are output only when the appropriate setting on [**AV1 Input**] or [**AV2 Input**] are [**Video**]. ■

Operating the picture adjustment

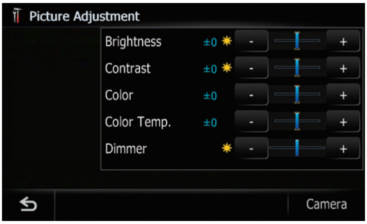
CAUTION

For safety reasons, you cannot use some of these navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake. Refer to Important Information for the user (a separate manual).

You can adjust the picture for each source and rear view camera.

1 Press and hold the MODE button.

Press and hold to display the "**Picture Adjustment**" screen.



Picture Adjustment
Brightness ±0
Contrast ±0
Color ±0
Color Temp. ±0
Dimmer

- **Brightness** — Adjusts the black intensity
- **Contrast** — Adjusts the contrast
- **Color** — Adjusts the color saturation
- **Color Temp.** — Adjusts the tone of color (red is emphasized or green is emphasized)
- **Dimmer** — Adjusts the brightness of display
- [**Camera**] — Shows the picture adjustment display for the rear view camera

❒ Touching [**Source**] while adjusting the rear view camera image returns you to the previous screen.

❐ The adjustments of **Brightness** and **Contrast** are stored separately when your vehicle’s headlights are off (daytime) and when your vehicle’s headlights are on (nighttime). These are switched automatically depending on whether the vehicle’s headlights are on or off.

❐ The adjustments of **Dimmer** is stored separately when your vehicle’s headlights are off (daytime) and when your vehicle’s headlights are on (nighttime). **Dimmer** is switched automatically only when the value of nighttime is lower than the value of daytime.

❐ You cannot adjust **Color** for the source without a video and navigation map display.

❐ The setting contents can be memorized separately for the following screen and the “Video image”.
  - **AM**/**FM**/**CD**/**ROM**/**iPod**(Music)/**SD**(audio)/**USB**(audio)/**Bluetooth Audio**/**XM**/**SIRIUS**/**Digital Radio** screen
  - **AV1** and **iPod**(Video)
  - **DVD-V**, **DVD-VR**, **DivX**
  - **SD**(Video) and **USB**(Video)
  - **AV2**(Video) and **EXT1**(Video), **EXT2**(Video)
  - Rear view camera image
  - Map screen

❐ The picture adjustment may not be available with some rear view cameras.

❐ Because of the LCD screen characteristics, you may not be able to adjust the screen at low temperatures.

2 Touch [+] or [–] to adjust the desired item.

Each touch of [**+**] or [**–**] increases or decreases the level of the desired item.

3 Touch ⮌ to return to the previous screen. ■

Options on the “AV System Settings” menu

Displaying the “AV System Settings” menu

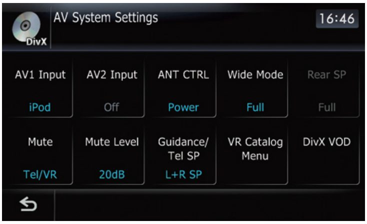
1 Press the HOME button to display the “Top Menu”.

2 Touch [Settings].

The “**Settings Menu**” screen appears.

3 Touch [AV Settings].

The “**AV System Settings**” menu appears.



AV1 Input: iPod
AV2 Input: Off
ANT CTRL: Power
Wide Mode: Full
Rear SP: Full
Mute: Tel/VR
Mute Level: 20dB
Guidance/Tel SP: L+R SP
VR Catalog Menu
DivX VOD

❒ You can only adjust [**Wide Mode**] when selecting an AV source with video.

❒ You can only adjust [**Rear SP**] when the AV source is “**Off**”.

Setting video input 1 (AV1)

You can switch this setting according to the connected component.

❒ This setting applies to mini-jack input.

● **Touch [AV1 Input] on the “AV System Settings” menu.**

➲ For details, refer to *Displaying the “***AV System Settings***” menu* on this page.

Each touch of [**AV1 Input**] changes the setting as follows:

- **iPod** — iPod connected with the USB Interface cable for iPod (CD-IU50V)
- **Video** — External video component
- **Off** — No video component is connected

❒ Use **AV1 Input** when connecting CD-RM10 (sold separately) through the external video component.

Setting video input 2 (AV2)

You can switch this setting according to the connected component.

❒ This setting applies to RCA inputs (AUDIO INPUT and VIDEO INPUT) on the back of the system.

● **Touch [AV2 Input] on the “AV System Settings” menu.**

➲ For details, refer to *Displaying the “***AV System Settings***” menu* on this page.

Each touch of [**AV2 Input**] changes the setting as follows:

- **Off** — No video component is connected
- **EXT** — Pioneer external unit connected with the RCA video cable
- **Video** — External video component

Switching the auto antenna setting

If the blue lead of the navigation system is connected to the antenna control terminal of the vehicle, select either of the following settings.

- **Power** — The antenna extends or turns on when the ignition switch is turned on. The antenna is stored or turned off when the ignition switch is turned off.
- **Radio** — The antenna extends or turns on only when the audio source is **FM** or **AM**. The antenna is stored or turned off when the AV source is switched to another source.

● **Touch [ANT CTRL] on the “AV System Settings” menu.**

➲ For details, refer to *Displaying the “***AV System Settings***” menu* on this page.

Touching [**ANT CTRL**] switches between [**Radio**] and [**Power**].

❒ Regardless of whether [**Radio**] or [**Power**] is selected, turning off the ignition switch will cause the antenna to automatically retract or turn off.

Changing the wide screen mode

● **Touch [Wide Mode] on the “AV System Settings” menu.**

➲ For details, refer to *Displaying the “***AV System Settings***” menu* on the previous page.

Each touch of [**Wide Mode**] changes the setting as follows:

- **Full (full)**
  A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.
- **Cinema (cinema)**
  A picture is enlarged by the same proportion as **Full** or **Zoom** in the horizontal direction and by an intermediate proportion between **Full** and **Zoom** in the vertical direction; ideal for a cinema-sized picture (wide screen picture) where captions lie outside the frame.
- **Zoom (zoom)**
  A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized picture (wide screen picture).
- **Normal (normal)**
  A 4:3 picture is displayed normally, giving you no sense of disparity since its proportions are the same as that of the normal picture.

❒ Different settings can be stored for each video source.

❒ The same setting is automatically applied for the following grouping.
  - **DVD-V**, **DVD-VR**, **DivX**
  - **EXT1** and **EXT2**
  - **AV1** and **AV2**
  - **iPod**

❒ When video is viewed in a wide screen mode that does not match its original aspect ratio, it may look strange.

❒ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author’s rights protected by the Copyright Law.

❒ The navigation map and the rear view camera picture is always viewed at **Full**.

Setting the rear output

The navigation system’s rear output can be used for a full-range speaker or subwoofer connection. If you switch **Rear SP** to **Sub. W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp. Initially, the navigation system is set for a rear full-range speaker connection (**Full**).

❒ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting only applies to the rear speaker leads.)

❒ “**Rear SP**” can be set only when the source is selected to “**Off**”.

1 Touch [Rear SP] on the “AV System Settings” menu.

➲ For details, refer to *Displaying the “***AV System Settings***” menu* on the previous page.

2 Touch [Rear SP] to switch the rear output setting.

When no subwoofer is connected to the rear output, select **Full**.
When a subwoofer is connected to the rear output, select **Sub. W**.

Switching the muting/attenuation timing

You can mute the AV source volume or attenuate the output signal. This setting is invalid for the mute signal has been received from the MUTE lead connected to the navigation unit. (Even if this setting is [**Off**], the navigation system will mute or attenuate the audio source volume when the signal is output via MUTE lead.)

● **Touch [Mute] on the “AV System Settings” menu.**

Each touch of [**Mute**] changes the settings as follows:

- **Guide/Tel/VR** — The volume is muted or attenuated according to the following conditions

  - When the navigation outputs the guidance voice.
  - When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).
  - When the voice recognition mode is activated.
- **Tel/VR** — The volume is muted or attenuated according to the following conditions
  - When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).
  - When the voice recognition mode is activated.
- **Off** — The volume does not change
- ❐ AV source volume returns to normal when the corresponding action is ended.

Switching the muting/attenuation level

You can select the muting/attenuation level of [**Mute**]. This setting is also effective for a mute signal that has been received from the MUTE lead connected to the navigation unit.

❐ This menu is not available when AV source is [**Off**].

● **Touch [Mute Level] on the “AV System Settings” menu.**

Each touch of [**Mute Level**] changes the settings as follows:

- **20dB** — The volume becomes 1/10
- **10dB** — The volume becomes 1/3
- **All** — The volume becomes 0
- ❐ When you select [**All**], no audio adjustments are possible during the sound is turned off.
- ❐ When you select [**20dB**] or [**10dB**], no audio adjustments are possible during the sound is attenuated.
- ❐ AV source volume returns to normal when the corresponding action is ended.
- ❐ Even when a mute signal has been received from MUTE lead connected to the navigation unit, navigation voice guidance cannot be attenuated or muted.

Changing the voice output of the navigation guidance

You can set the speaker to output the navigation guidance and phone voice, etc.

● **Touch [Guidance/Tel SP] on the “AV System Settings” menu.**

Each touch of [**Guidance/Tel SP**] changes the settings as follows:

- **L+R SP** — Uses both the front right and left speakers
- **Left SP** — Uses only the front left speaker
- **Right SP** — Uses only the front right speaker

Acquiring/Cataloging iPod music information

If you always set the language other than “**US English**” on “**Voice Language**”, this setting is unnecessary.

Unless [**VR Catalog Mode**] is turned off, this navigation system tries to acquire the information needed to operate iPod with voice commands. It may take a short period of time to transfer the information. Change the setting according to your usage.

The navigation system starts acquiring/cataloging music information (1) when the iPod is connected or when the system boots up while the iPod is connected and (2) when iPod is the selected and displayed AV Source, unless [**VR Catalog Mode**] is turned off.

❐ This function is available when [**Change Control Mode**] is set to [**Navi**].

❐ If you do not use iPod, this setting is unnecessary.

❐ During transfer, iPod operations (such as [**Shuffle**], [**MENU**], or [**Video**]) are not available.

- ❒ Once the cataloging is completed, you can deactivate [**VR Catalog Menu**] until you update the content/data on iPod. If you update the iPod data, activate [**VR Catalog Menu**] again to transfer the music information and synchronize the music information for voice commands with the data on iPod.
- ❒ After you select "**Off**" in [**VR Catalog Mode**], the system doesn't catalog the data on the iPod. In such case, the previously cataloged data are available as voice commands.
- ❒ Once you start the cataloging process, only a few basic voice commands can be used for iPod until the process has completely finished.
- ❒ If unreadable characters are included in the data on your iPod, names or types may not be available as voice commands.

Important Notice regarding Voice Control for iPods

Voice Control for iPods may be limited if cataloging of iPod content is not completed. Cataloging of iPod content only occurs when the system is in "**AV Source**" mode and the "**iPod**" is the selected and displayed "**AV Source**" screen. Cataloging of iPod content will not occur if the system is off, if any other "**AV Source**" is selected (aside from iPod), or if the system is in any other mode (aside from "**AV Source**" mode) such as "**Destination Menu**", "**Settings Menu**", "**Phone Menu**" or the map screen. If you wish to use Voice Control for all iPod content, it is recommended that you first connect your iPod, select "**iPod**" as the AV source, and keep the iPod screen displayed until cataloging is completed — cataloging of iPod content should only take a few minutes, and will depend on the size of the content stored on your iPod. A message will be displayed when cataloging is completed.

1 Touch [VR Catalog Menu] on the "AV System Settings" menu.

- ➲ For details, refer to *Displaying the "***AV System Settings***" menu* on page 162.

2 Touch [On] or [Off] to activate or deactivate "VR Catalog Mode".

- ■ Touch [**Cancel**].

Stops the cataloging of iPod.
If you want to restart the cataloging of iPod, touch [**Restart**].

Displaying your DivX VOD registration code

In order to play DivX VOD (video on demand) content on this navigation system, you first need to register the unit with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

- ❒ This feature is available when the selected source is **CD**, **ROM**, **DivX**, **DVD-V** or **DVD-VR**.

● Touch [DivX VOD] on the "AV System Settings" menu.

Your 8-digit registration code is displayed.

- ❒ Make a note of the code as you will need it when you register with a DivX VOD provider. ■

The "AV Sound Settings" menu options

Displaying the "AV Sound Settings" menu

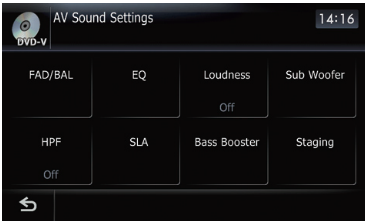
1 Press the HOME button to display the "Top Menu".

2 Touch [Settings].

The "**Settings Menu**" screen appears.

3 Touch [AV Sound].

The "**AV Sound Settings**" screen appears.



- ❒ You cannot make adjustments in the following situations:
  - — AV source is [**Off**]
  - — During muting/attenuation
- ❒ You cannot select [**SLA**] when the FM tuner is selected as the AV source.

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Touch [FAD/BAL] on the “AV Sound Settings” menu.

- ➲ For details, refer to *Displaying the “***AV Sound Settings***” menu* on the previous page.

When [**Sub. W**] is selected in [**Rear SP**], [**Balance**] will be displayed instead of [**FAD/BAL**] and front/rear speaker balance cannot be adjusted.

- ➲ Refer to *Setting the rear output* on page 163.

2 Touch [▲] or [▼] to adjust front/rear speaker balance.

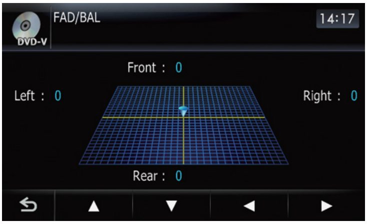
Each time you touch [▲] or [▼], the front/rear speaker balance moves towards the front or the rear.

“**Front:15**” to “**Rear:15**” is displayed as the front/rear speaker balance moves from front to rear.

Setting “**Front:**” and “**Rear:**” to “**0**” is correct when using a two speaker system.

3 Touch [◀] or [▶] to adjust left/right speaker balance.

Each time you touch [◀] or [▶], the left/right speaker balance moves towards the left or the right.



Left:15 to **Right:15** is displayed as the left/right speaker balance moves from left to right.

Using the equalizer

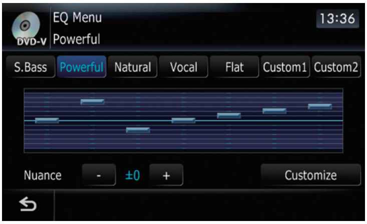
The equalizer lets you adjust equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves

There are seven stored equalizer curves that you can easily recall at any time. Here is a list of the equalizer curves:

Equalizer curve
Super Bass **Super Bass** is a curve in which only low-pitched sound is boosted.
Powerful **Powerful** is a curve in which low-pitched and high-pitched sounds are boosted.
Natural **Natural** is a curve in which low-pitched and high-pitched sounds are slightly boosted.
Vocal **Vocal** is a curve in which the midrange, which is the human vocal range, is boosted.
Flat **Flat** is a flat curve in which nothing is boosted.
Custom1 **Custom1** is an adjusted equalizer curve that you create. A separate custom curve can be created for each source.
Custom2 **Custom2** is an adjusted equalizer curve that you create. If you select this curve, the effect is reflected all AV source.

1 Touch [EQ] on the "AV Sound Settings" menu.



➲ For details, refer to *Displaying the "***AV Sound Settings***" menu* on page 165.

2 Touch the equalizer you want.

Adjusting the preset equalizer curve effect

You can adjust the effect of the preset equalizer curves.

The following equalizer curves can be adjusted:

- **Super Bass**
- **Powerful**
- **Natural**
- **Vocal**

1 Touch [EQ] on the "AV Sound Settings" menu.

➲ For details, refer to *Displaying the "***AV Sound Settings***" menu* on page 165.

2 Touch the equalizer you want.

3 Touch [+] or [–] next to "Nuance".

❒ The level can be adjusted in the range of –6 to +6.

❒ If [**Natural**] is selected, the level can be adjusted in the range of –4 to +6.

Adjusting the equalizer curves

You can adjust the currently selected equalizer curve setting as desired. Adjustments can be made with a 7-band graphic equalizer.

The difference between "Custom1" and "Custom2"

- A separate **Custom1** curve can be created for each source. If you make adjustments when a curve **Super Bass**, **Powerful**, **Natural**, **Vocal**, **Flat**, or **Custom1** is selected, the equalizer curve settings will be memorized in **Custom1**.
- A **Custom2** curve can be created common to all sources. If you make adjustments when **Custom2** curve is selected, the **Custom2** curve will be updated.
- The adjusted **Custom1** curve is memorized for each of the source selected, but one curve is shared for the following sources.
  - — **CD**, **ROM**, **DVD-V**, **DVD-VR**, **DivX**
  - — **AM** and **FM**
  - — **EXT1** and **EXT2**
  - — **AV1** and **AV2**
  - — **SD** and **USB**
  - — **XM** and **SIRIUS**
- The different source volume level can be set between **iPod** and **USB**.
- When [**Flat**] is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between [**Flat**] and a set equalizer curve.

1 Touch [EQ] on the "AV Sound Settings" menu.

➲ For details, refer to *Displaying the "***AV Sound Settings***" menu* on page 165.

2 Touch one of the keys to select a curve that you want to use as the basis of customizing.

3 Touch [Customize].

4 Touch the frequency that you want to adjust the level.

5 Touch [▲] or [▼] to adjust the level of the equalizer band.

Each time you touch [▲] or [▼], the level of the equalizer band increases or decreases.

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Touch [Loudness] on the “AV Sound Settings” menu.

- ➲ For details, refer to *Displaying the “***AV Sound Settings***” menu* on page 165.

2 Touch [Loudness] to select the level you want.

Each time you touch [**Loudness**], the level is selected in the following order:

Off — **Low** — **Mid** — **High**

Using subwoofer output

The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

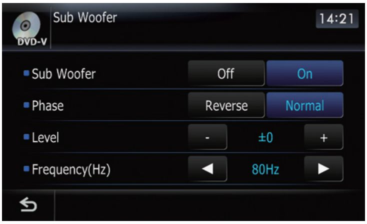
- ❒ Only when “**Sub Woofer**” is [**On**], you can adjust “**Phase**”, “**Level**” and “**Frequency(Hz)**”.

1 Touch [Sub Woofer] on the “AV Sound Settings” menu.

- ➲ For details, refer to *Displaying the “***AV Sound Settings***” menu* on page 165.

2 Touch [On] to turn subwoofer output on.

To turn subwoofer output off, touch [**Off**].



3 Touch [Reverse] or [Normal] to select the phase of subwoofer output.

4 Touch [+] or [–] next to “Level” to adjust the output level.

+6 to **–24** is displayed as the level is increased or decreased.

5 Touch [◀] or [▶] next to “Frequency(Hz)” to select cut-off frequency.

Each time you touch [◀] or [▶], cut-off frequencies are selected in the following order:

50 Hz — **63 Hz** — **80 Hz** — **100 Hz** — **125 Hz**

Only frequencies lower than those in the selected range are output from the subwoofer.

Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, activate **HPF** (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Touch [HPF] on the “AV Sound Settings” menu.

- ➲ For details, refer to *Displaying the “***AV Sound Settings***” menu* on page 165.

2 Touch [HPF] to select cut-off frequency.

Each time you touch [**HPF**] selects cut-off frequencies in the following order:

Off — **50 Hz** — **63 Hz** — **80 Hz** — **100 Hz** — **125 Hz**

Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- ❒ Settings are based on the FM tuner volume level, which remains unchanged.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Touch [SLA] on the “AV Sound Settings” menu.

- ➲ For details, refer to *Displaying the “***AV Sound Settings***” menu* on page 165.

3 Touch [+] or [–] to adjust the source volume.

+8dB to **–8dB** is displayed as the source volume is increased or decreased.

The following AV sources are set to the same source level adjustment volume automatically.

- **DVD-V** and **DVD-VR**
- **CD**, **ROM**, **DivX**
- **EXT1** and **EXT2**
- **AV1** and **AV2**
- **SD** and **USB**
- **XM** and **SIRIUS**

❒ The different source volume level can be set between **iPod** and **USB**.

Enhancing bass (Bass Booster)

The "**Bass Booster**" enhances bass sounds, which can be muted by driving noise.

1 Touch [Bass Booster] on the "AV Sound Settings" menu.

➲ For details, refer to *Displaying the "***AV Sound Settings***" menu* on page 165.

2 Touch [+] or [–] to adjust the range from 0 to 6.

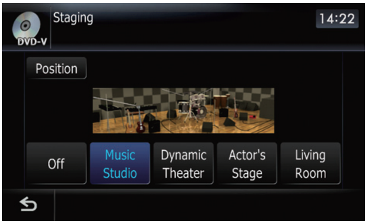
Setting the simulated sound stage

You can select the desired effect from various simulated sound stages, such as Music Studio or Dynamic Theater. You can also adjust a listener positioning effect.

Setting a stage that fits your image

1 Touch [Staging] on the "AV Sound Settings" menu.

2 Touch desired stage setting.



❒ [**Living Room**] setting that emphasizes mid-range sound hardly has any effect near the maximum volume level.

❒ When you set staging to an option other than [**Off**], the high pass filter (**HPF**) setting turns [**Off**].

➲ For details, refer to *Using the high pass filter* on the previous page.

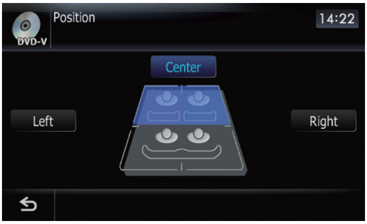
Adjusting a position effect

You can select a listener position that you want to make as the center of sound effects.

1 Touch [Staging] on the "AV Sound Settings" menu.

2 Touch [Position].

3 Touch desired position.



To Ensure Safe Driving

CAUTION

For your safety, avoid viewing the screen in the voice operation as much as possible while driving.

If you use voice operation, select [**US English**] in [**Voice Language**] of “**Language**”. If you select other languages, voice operation will not be available.

Basics of Voice Operation

Your Pioneer navigation system uses the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

- ❒ This function is not available while the cataloging of iPod is created.

Flow of voice operation

You can start voice operation any time even when the map screen is displayed or AV is operating. (Some operations are not available.)
The basic steps of voice operations are as follows.

1 Switch the screen to map screen or AV operation screen.

2 Press the VOICE button to activate voice operations.

3 Speak a command into the microphone after the beep.

4 When the command is recognized, the navigation system displays next options on the screen, and pronounces it in some cases.

5 Repeat previous step as necessary.

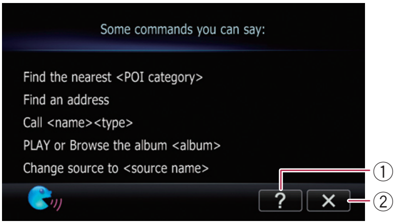
6 The requested operation will be carried out.

- ❒ The voice operation may not be operable for a minute after the navigation system has booted up.
- ❒ Voice operation will be activated 30 seconds after the map screen is displayed.
  If the **VOICE** button does not respond, display the disclaimer screen and then touch [**OK**].
  The map screen is displayed.

Starting voice operation

- **Press the VOICE button when the map screen or the AV operation screen is displayed.**

The voice operation screen appears.



Some commands you can say:

Find the nearest <POI category>
Find an address
Call <name><type>
PLAY or Browse the album <album>
Change source to <source name>

① ?:
You can listen to the brief operating instruction.

② ×:
cancels voice operation.
You can cancel the voice operation feature at any time by saying “**Cancel**”. After you cancel voice operations, the display returns to the screen displayed before the voice operation screen appeared.

How to use the voice operation

Searching for a location by address

In this example, you want to search for a location by address and set it as your destination.

1 Press the MODE button to display the map screen or the AV operation screen.

2 Press the VOICE button to activate voice operations.

A list of commands for voice operation appears. After a message, the beep indicates that the system is ready to accept your voice command. Say a command after this beep.

3 Say "I need directions".

A message prompting you to select a search by address or by POI appears.

4 Say "Find an address".

A message prompting the next operation is given.

5 Say a command according to the message displayed on the screen.

- ❒ When the list of candidates with number appears, say the number that you want to select.
  When you select the entry next to "1", say "**Number One**".
- ❒ If there are multiple items that correspond to the name you gave, the list screen appears. In this case, touch the item you want to select from the list.

Search for POI in vicinity

In this example, you want to search for a POI and set it as your destination.

1 Press the MODE button to display the map screen or the AV operation screen.

2 Press the VOICE button to activate voice operations.

A list of commands for voice operation appears. After a message, the beep indicates that the system is ready to accept your voice command. Say a command after this beep.

3 Say "I need directions".

A message prompting you to select a search by address or by POI appears.

4 Say "Point of interest".

A message prompting the next operation is given.

5 Say a command according to the message displayed on the screen.

- ❒ When the list of candidates with number appears, say the number that you want to select.
  When you select the entry next to "1", say "**Number One**".
- ❒ If there are multiple items that correspond to the name you gave, the list screen appears. In this case, touch the item you want to select from the list.

Calling the entry on "Contacts"

A method for dialing the entry named "Nancy" is described here along with an operational example.

1 Press the VOICE button to activate voice operations.

2 Say "Call Nancy" to make a call.

A message confirming whether to dial appears.

3 Say "Yes".

Dialing starts.

Operating iPod by voice

You can play music using voice operation from the iPod connected to the navigation system.

- ❒ To use the content/data on the iPod for voice operation, transfer the data to this system first.
  - ➲ For details, refer to *Acquiring/Cataloging iPod music information* on page 164.

Examples of voice operation of the iPod are shown below. (A method for playing the album title named "Pioneer" is described here, along with an operational example.)

1 Press the VOICE button to activate voice operations.

2 Say "Change Source" to display the AV source selection screen.

3 Say “iPod” on the selection screen to switch the AV source to iPod.

- ❒ Touching the item on the screen also enables you to select the desired AV source.

4 Press the VOICE button to activate voice operations.

5 Say “Play the album Pioneer” to playback the album name “Pioneer”.

If the command is recognized properly, playback starts from the first song of “**Pioneer**”. ■

Available Basic Voice Commands

The navigation system can also recognize the words in the following list.

Basic commands

Voice commands and operations
Back → The previous screen returns. *Cancel* → Cancels the voice operation. *Help* → Outputs the brief operating instruction by voice. *Next page*, *Previous page* → Switches the page. *Last page*, *First page* → Switches to the last or first page.

Voice operation for the iPod

For <Artist name>, <Album name>, <Playlist name>, <Genre name> shown on the following chart, say the name their name in the iPod.

- ❒ Playback of iPod movies is not available using voice commands.

Voice commands and operations
Shuffle play → Plays all songs randomly.
Resume → Resumes the song or the video currently playing .
Pause → Pauses the song or the video currently playing .
Next song → Plays the next song.
Previous song → Plays the previous song or return to the beginning of the song currently playing.
Play songs → Starts playback from the top of “**Songs**”.

Voice commands and operations
Play artists → Displays the artist list → Say the artist name that you want to play. *Play the artist <Artist name>* → Starts playback from the top of the selected artist.
Play albums → Displays the album list → Say the album name that you want to play. *Play the album <Album name>* → Starts playback from the top of the selected album.
Play playlists → Displays the playlist → Say the playlist that you want to play. *Play the playlist <Playlist name>* → Starts playback from the top of the selected playlist.
Play genres → Displays the genre list → Say the genre that you want to play. *Play the genre <Genre name>* → Starts playback from the top of the selected genre.
Browse artists → Displays the artist list together with sub-screen to continue the voice operation. → Say the desired voice commands. *Browse the artist <Artist name>* → Displays the album list of the selected artist together with sub-screen to continue the voice operation. → Say the desired voice commands.
Browse albums → Displays the album list together with sub-screen to continue the voice operation. → Say the desired voice commands. *Browse the album <Album name>* → Displays the song list of the selected album together with sub-screen to continue the voice operation. → Say the desired voice commands.
Browse playlists → Displays the playlist together with sub-screen to continue the voice operation. → Say the desired voice commands. *Browse the playlist <Playlist name>* → Displays the song list of the selected playlist together with sub-screen to continue the voice operation. → Say the desired voice commands.
Browse genre → Displays the genre list together with sub-screen to continue the voice operation. → Say the desired voice commands. *Browse the genre <Genre name>* → Displays the song list of the selected genre list together with sub-screen to continue the voice operation. → Say the desired voice commands.
Play more music artist → Plays the songs related to the currently playing artist.
Play more music album → Plays the songs related to the currently playing album.
Play more music genre → Plays the songs related to the currently playing genre.
Next page, *Previous page* → Displays the previous or next page of the selection list. (*1)
First page, *Last page* → Displays the first or last page of the the selection list. (*1)

(*1) The voice commands is available only when the selection list is displayed.

Voice operation for AV source (other than iPod)

AV source selection

Voice commands and operations
Change Source to DISC → Switches the AV source to **Disc**. *Change Source to FM* → Switches the AV source to **FM**. *Change Source to AM* → Switches the AV source to **AM**. *Change Source to XM Satellite Radio* → Switches the AV source to **XM**. *Change Source to SIRIUS Satellite Radio* → Switches the AV source to **SIRIUS**. *Change Source to HD Radio* → Switches the AV source to **Digital Radio**. *Change Source to SD Media* → Switches the AV source to **SD**. *Change Source to USB* → Switches the AV source to **USB**. *Change Source to iPod* → Switches the AV source to **iPod**. *Change Source to Bluetooth Audio* → Switches the AV source to **Bluetooth Audio**.

Built-in DVD drive, external storage device (USB, SD)

Voice commands and operations
Shuffle play → Plays all songs randomly.
Pause → Pauses the track or file currently playing.
Resume → Resumes the track or file currently playing.
Next song → Plays the next track or file.
Previous song → Plays the previous track or file, or returns to the beginning of the track or file currently playing.

Voice commands related to hands-free phoning

- ❒ You can make a phone call by voice dialing if the cellular phone featuring Bluetooth wireless technology is being paired with the navigation system.
- ❒ For <entry's name> shown on the following chart, say the name of the entry stored in "**Contacts**".
- ❒ For <phone number> shown on the following chart, say the desired phone number.

Voice commands and operations
Call <entry's name> → Makes a call to the entry (*2).
Call <entry's name> general → Displays the message confirming whether to dial → Say *Yes* → Dials the general phone number of the entry (*3).
Call <entry's name> mobile → Displays the message confirming whether to dial → Say *Yes* → Dials the cellular phone number of the entry (*3).
Call <entry's name> home → Displays the message confirming whether to dial → Say *Yes* → Dials the home phone number of the entry (*3).
Call <entry's name> work → Displays the message confirming whether to dial → Say *Yes* → Dials the office phone number of the entry (*3).
Call <entry's name> other → Displays the message confirming whether to dial → Say *Yes* → Dials the other phone number of the entry (*3).
Call <phone number> → Displays the message confirming whether to dial → Say *Yes* → Dials the phone number.
Make a call → Say the phone number you want to call → Displays the message confirming whether to dial → Say *Yes* → The system starts dialing to the number.
Make a call → Say the name of entry stored on "**Contacts**" you want to call → Displays the message confirming whether to dial → Say *Yes* → The system starts dialing to the number (*2).
List outgoing calls → Display the list of recent outgoing calls ("**Dialed Calls**") to select the number and call (*4).
List recent calls → *Incoming calls* → Display the list of recently received calls ("**Received Calls**") to select the number and call (*4).
List recent calls → *Outgoing calls* → Display the list of recent outgoing calls ("**Dialed Calls**") to select the number and call (*4).
List recent incoming calls → Display the list of recently received calls ("**Received Calls**") to select the number and call (*4).

(*2) If the entry has multiple phone number data, selection list may appear. In such case, say the type of phone number.
(*3) If there is no corresponding type on the entry, the system may suggest you other phone numbers of the entry. In such case, say the type of phone number.
(*4) Touching the item on the screen also enables you to select the desired list.

Tips for Voice Operation

For your voice commands to be correctly recognized and interpreted, ensure that conditions are suitable for recognition.

Close the vehicle windows
Please note that wind through the vehicle window or miscellaneous noise from outside the vehicle can interfere with voice operation.

Position the microphone carefully
For optimum pick-up, the microphone should be fixed at a suitable distance directly in front of the driver.

Pause before giving a command
Speaking too soon may cause the recognition to fail.

Pronounce your commands carefully
Speak slowly, deliberately, and clearly.

Setting the anti-theft function

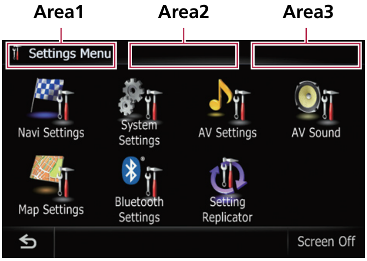
You can set a password for the navigation system. If the back-up lead is cut after the password is set, the navigation system prompts for the password at the time of next boot up.

Setting the password

1 Press the HOME button to display the “Top Menu”.

2 Touch [Settings].
The “**Settings Menu**” screen appears.

3 Touch Area1, followed by Area2, and then touch and hold Area3.



4 Touch [Set Password].
The password setting screen appears.

5 Enter the password you want to set.

❒ 5 to 16 characters can be entered for a password.

6 Touch [OK].

7 Reenter the password to confirm the setting.

8 Touch [OK].
Password protection is applied.

❒ If you want to change the password currently set, enter the current password and then enter the new one.

Entering the password

On the password input screen, you must enter the current password. If you enter an incorrect password three times, the screen is locked and operations using touch panel keys are disabled.

1 Enter the password.

2 Touch [OK].
The message “**The unit has been locked because an invalid password was entered three times. Turn ACC off and on, and enter your password.**” appears if you entered the correct password and the navigation system is unlocking.

Deleting the password

The current password can be deleted.

1 Press the HOME button to display the “Top Menu”.

2 Touch [Settings] on the “Top Menu”.

3 Touch Area1, followed by Area2, and then touch and hold Area3.

4 Touch [Clear password].
The password setting screen appears.

5 Enter the current password.

6 Touch [OK].

7 Touch [Yes].
The message for deletion appears and then the current password is deleted.

Forgotten password

Contact the nearest authorized Pioneer Service Station. ■

Restoring the default setting

Resets various settings registered to the navigation system and restores them to the default or factory settings.

❒ Some data remains. Be sure to read *Returning the navigation system to the default or factory settings* first.

1 Display the “System Settings” screen.

➲ For details, refer to *Displaying the “***System Settings***” screen* on page 98.

2 Touch [Restore Factory Settings].

The message confirming whether to restore the settings appears.

3 Touch [Yes]. ■

Returning the navigation system to the initial state

You can return settings or recorded content to the default or factory settings.

❒ Some data remains. Be sure to read *Returning the navigation system to the default or factory settings* first.

1 Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation system back on.

The splash screen appears.

2 Press and hold the MODE button and the TRK (◀) button while splash screen appears.

The “**Select Items to Reset**” screen appears.

3 Touch [Clear user information].

The message confirming whether to erase all user data appears.

And then touch [**Yes**] to erase all user data.

- Touch [**Reset**].

Various settings registered to the navigation system are reset to the default or factory settings.

4 Touch [Yes].

The recorded contents are cleared. ■

Returning the navigation system to the default or factory settings

You can return settings or recorded content to the default or factory settings. There are four methods to clear user data, and the situations and the cleared content are different for each method. For information regarding the content that is cleared by each method, see the list presented later.

Method 1: The battery of the vehicle is removed or the yellow lead of the navigation system is disconnected.

Clears almost all settings of the AV function.

Method 2: Touch [Restore Factory Settings].

This clears some items in the “**Navi Settings**” menu, the “**System Settings**” menu and the “**Bluetooth Settings**” menu.

➲ For details, refer to *Setting items to be deleted* on the next page.

Method 3: Touch [Clear user information] on the “Select Items to Reset” screen.

Clears almost all settings and user data of the navigation function and the phone function.

➲ For details, refer to *Setting items to be deleted* on the next page.

Method 4: Touch [Reset] on the “Select Items to Reset” screen.

Clears almost all settings and user data of the navigation function and the phone function.

➲ For details, refer to *Setting items to be deleted* on the next page.

Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings.

❐ Almost all items not listed below will be retained. However, some of the items to be returned to their default values are not listed if the setting value can be easily recovered by user, such as the last map scale, the last status of AV operation screen, etc.

—: The setting will be retained.

✓: The setting will be cleared and returned to the default or factory settings.

Navigation functions		**Method 1**	**Method 2**	**Method 3**	**Method 4**
Map function	View mode and scale setting on the map	—	—	✓	✓
	Direction of the map	—	✓	✓	✓
	Last cursor position on the map screen	—	✓	✓	✓
Route Setting	Current route	✓	—	✓	✓
	Guidance state of the current route	—	—	✓	✓
	Vehicle position information	—	—	✓	✓
	Route conditions	—	✓	✓	✓
[**Destination**]	Point registered in [**Favorites**]	—	—	✓	—
	[**History**]	—	—	✓	—
	All settings on "**MSN Direct**"	—	✓	✓	✓
Map Settings menu	[**View Mode**]	—	—	✓	✓
	Other settings	—	✓	✓	✓
[**Navi Settings**]	[**3D Calibration Status**]	—	—	—	—
	[**Set Home**]	—	—	✓	✓
	[**Modify Current Location**]	—	—	✓	✓
	Other settings	—	✓	✓	✓
[**System Settings**]	[**Program Language**], [**Voice Language**]	—	—	✓	✓
	[**Time**]	—	—	✓	✓
	[**Back Camera**]	✓	—	—	—
	Other settings	—	✓	✓	✓

Navigation functions		Method 1	Method 2	Method 3	Method 4
[**Phone Menu**] menu	All settings	—	✓	✓	✓
Other functions	Anti-theft password	—	—	—	—

AV functions		Method 1	Method 2	Method 3	Method 4
Volume		✓	—	—	—
[**AV Settings**]	All settings	✓	—	—	—
[**AV Sound**]	All settings	✓	—	—	—
Function menu of each AV source	All settings	✓	—	—	—
Other functions	[**Picture Adjustment**]	✓	—	—	—
	Tilt	✓	—	—	—

Appendix

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Problems with the navigation screen

Symptom	Cause	Action (Reference)
The power doesn't turn on. The navigation system doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the navigation system back on.
You cannot position your vehicle on the map without a significant positioning error.	The GPS antenna is in an unsuitable location.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS antenna if necessary.
	Obstacles are blocking signals from the satellites.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Check the GPS signal reception and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear.
	The position of satellites relative to your vehicle is inadequate.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Continue driving until reception improves.
	Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Wait until reception improves.
	If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. When using a cellular phone, keep the antenna of the cellular phone away from the GPS antenna.

Appendix

Symptom	Cause	Action (Reference)
You cannot position your vehicle on the map without a significant positioning error.	Something covers the GPS antenna.	Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.
	Signals from the vehicle's speed pulse are not being picked up properly.	Check that the cables are properly connected. If necessary, consult the dealer that installed the system.
	The navigation system may not be mounted securely in your vehicle.	Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system.
	The navigation system is installed with an extreme angle exceeding the installation angle limitations.	Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details, refer to Installation Manual.)
	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (violet) is connected properly. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.)
The map color does not switch automatically between daytime and nighttime.	[**Day/Night Display**] is set to [**Day**].	Check "**Day/Night Display**" setting and make sure "**Automatic**" is selected. (Page 48)
	The orange/white lead is not connected.	Check the connection.
The screen is too bright.	An improper value has been set on "**Brightness**".	Check the settings. (Page 160)
The display is very dim.	The vehicle's light is turned ON, and [**Automatic**] is selected on [**Day/Night Display**].	Read about [**Day/Night Display**] setting and, if desired, select [**Day**]. (Page 48)
	An improper value has been set on "**Brightness**".	Check the settings. (Page 160)
No sounds of AV source are produced. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The attenuator or mute is on.	Turn the attenuator or mute off.
	A speaker lead is disconnected.	Check the connection.
The volume of navigation guidance and beeps cannot be adjusted.	**VOL** (**+**/**–**) button is used to adjust the volume.	Turn the volume up or down using [**Volume**] on the "**System Settings**" menu. (Page 100)
The person on the other end of the phone call cannot hear the conversation due to an echo.	The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo.	Use the following methods to reduce the echo: —Lower the volume on the receiver —Have both parties pause slightly before speaking
There's no picture.	The parking brake cord is not connected.	Connect the parking brake cord, and apply the parking brake.
	The parking brake is not applied.	Connect the parking brake cord, and apply the parking brake.
	The backlight of the LCD panel is turned off.	Turn on the backlight. (Page 104)

Appendix

Symptom	Cause	Action (Reference)
"Rear display" picture disappears.	The source disc being listened to in the navigation system has been ejected.	Before ejecting the disc, switch the source. This problem may occur when certain connection methods are used.
	There is a problem with the "Rear display", for example a faulty wiring connection.	Check the "Rear display" and its connection.
	An AV source that cannot output to the rear display is selected.	Select an appropriate AV source.
Nothing is displayed and the touch panel keys cannot be used.	The setting for the rear view camera is incorrect.	Select the appropriate setting for the rear view camera.
	The shift lever was placed in [R] when the rear view camera was not connected.	Select the correct polarity setting for [**Back Camera**]. (Page 101)
There is no response when the touch panel keys are touched, or a different key responds.	The touch panel keys deviate from the actual positions that respond to your touch for some reason.	Perform touch panel calibration. (Page 102)
The external storage device (USB, SD) cannot be used.	The USB storage device has been removed immediately after plugging it.	Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the navigation system back on.

Problems in the AV screen

Symptom	Cause	Action (Reference)
CD or DVD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean the disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the disc are an irregular file format.	Check the file format.
	The disc format cannot be played back.	Replace the disc.
	The loaded disc is a type this system cannot play.	Check what type of disc it is. (Page 196)
The screen is covered by a caution message and the video cannot be shown.	The parking brake lead is not connected or applied.	Connect the parking brake lead correctly, and apply the parking brake.
	The parking brake interlock is activated.	Park your vehicle in a safe place and apply the parking brake.
No video output from connected equipment. No video output from connected iPod.	[**AV1 Input**] or [**AV2 Input**] setting is incorrect.	Correct the settings. (Page 162)
	The connection of the USB interface cable for iPod is incorrect.	Connect both the USB plug and the RCA cable side. (If only one of these connection has been made, the iPod will not work properly.) (Page 33)
The audio or video skips.	The navigation system is not firmly secured.	Secure the navigation system firmly.

Symptom	Cause	Action (Reference)
No sounds are produced. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
	The system is performing still, slow motion, or frame-by-frame playback with DVD-Video.	There is no sound during still, slow motion, or frame-by-frame playback with DVD-Video.
	The system is paused or performing, fast reverse or forward during the disc playback.	For the media other than music CD (CD-DA), there is no sound on fast reverse or forward.
The icon ⊘ is displayed, and operation is not possible.	The operation is not compatible with the video configuration.	This operation is not possible. (For example, the DVD playing does not feature that angle, audio system, subtitle language, etc.)
The picture stops (pauses) and the navigation system cannot be operated.	The reading of data is impossible during disc playback.	After touching ■ once, start playback once more.
The picture is stretched, with incorrect aspect ratio.	The aspect setting is incorrect for the display.	Select the appropriate setting for that image. (Page 163, Page 130)
A parental lock message is displayed and DVD playback is not possible.	Parental lock is on.	Turn parental lock off or change the level. (Page 131)
Parental lock for DVD playback cannot be canceled.	The code number is incorrect.	Input the correct code number. (Page 131)
Playback is not with the audio language and subtitle language settings selected in [**DVD/DivX® Setup**].	The DVD playing does not feature dialog or subtitles in the language selected in [**DVD/DivX® Setup**].	Switching to a selected language is not possible if the language selected in [**DVD/DivX® Setup**] is not recorded on the disc. (Page 130)
The picture is extremely unclear/distorted and dark during playback.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since the navigation system is compatible with the copy guard analog copy protect system, the picture may suffer from horizontal stripes or other imperfections when a disc with that kind of protection signal is viewed on some displays. This does not mean the navigation system is malfunctioning.
iPod cannot be operated.	The iPod is frozen.	• Reconnect the iPod with the USB interface cable for iPod. • Update the iPod software version.
	An error has occurred.	• Reconnect the iPod with the USB interface cable for iPod. • Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation system back on. • Update the iPod software version.

Appendix

Problems with the phone screen

Symptom	Cause	Action (Reference)
Dialing is not possible because the touch panel keys for dialing are inactive.	Your phone is out of range for service.	Retry after re-entering the range for service.
	The connection between the cellular phone and the navigation system cannot be established now.	Perform the connection process.

If the screen becomes frozen...

Park your vehicle in a safe place, and turn off the engine. Turn the ignition key back to “Acc off”. Then start the engine again, and turn the power to the navigation system back on.

■

Messages and how to react to them

The following messages may be displayed by your navigation system. Refer to the table below to identify the problem, then take the suggested corrective action.
There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Messages and how to react to them

Message	Cause	Action (Reference)
Route calculation was not possible.	Route calculation has failed because of a malfunction in map data, software, or hardware.	• Change the destination. • Consult the Pioneer Local dealer if this message persists.
Route calculation not possible. Destination too far.	The destination is too far.	Set a destination closer to the starting point.
Route calculation not possible. Destination too close.	The destination is too close.	Set a destination farther from the starting point.
Route calculation not possible. Navigation cannot be provided around destination or starting point.	The destination, waypoint(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	• Set a destination and waypoint(s) on roads. • Reset the destination after you drive the vehicle to any road.
Route to destination cannot be calculated.	The destination or waypoint(s) are in an isolated island, etc. without a ferry and the route calculation is impossible. If there is no road connected to your starting point or destination, this message will appear.	Change the destination.
Failed to create route profile	In rare cases, a route calculation error may occur.	• Retry. • Consult the Pioneer Local dealer if this message persists.
No picture folder. Save jpeg file to /Pictures/ folder	Cannot load the image because "**Pictures**" folder is not found in the inserted external storage device.	Use appropriate data and store it correctly. (Page 101)
	"**Pictures**" folder exists on the SD memory card but there is no loadable data in the folder.	Use appropriate data and store it correctly. (Page 101)
Data Read error.	Failed to read the data for some reason.	Use appropriate data and store it correctly. (Page 101)
The file is corrupt	The data is damaged or an attempt was made to set an image file that was not made to specifications as the splash screen.	Use appropriate data and store it correctly. (Page 101)

Appendix

Message	Cause	Action (Reference)
Connection failed.	The cellular phone's Bluetooth wireless technology is turned off.	Activate the target phone's Bluetooth wireless technology.
	The cellular phone is paired (connected) with another device.	Cancel the pairing (connection) and retry.
	Rejection has been received from the cellular phone.	Operate the target phone and accept the connection request from the navigation system. (Furthermore, check the connection settings on your cellular phone.)
	The target cellular phone cannot be found.	Check whether your cellular phone is activated and, whether the distance to your cellular phone is not too far.
Could not find any available phone.	No available phone exists in the surroundings when the system searches for connectable cellular phones featuring Bluetooth wireless technology.	• Activate the target phone's Bluetooth wireless technology. • Check whether your cellular phone is activated and, whether the distance to your cellular phone is not too far.
Registration failed.	The cellular phone's Bluetooth wireless technology is turned off during the registration step.	Keep turning the target phone's Bluetooth wireless technology on during the registration.
	Rejection by the cellular phone has received.	Operate the target phone and accept the registration request from the navigation system. (Furthermore, check the connection settings on your cellular phone.)
	Registration step has failed for some reason.	Retry the registration and if the registration still fails, try registering using your cellular phone.

■

Appendix

Messages for audio functions

When problems occur with AV source playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service center. The messages in "( )" will appear on the "Rear display".

Built-in DVD drive

Message	Cause	Action (Reference)
Reading error (**ERROR-02-XX**)	Dirty	Clean the disc.
	Scratched disc	Replace the disc.
	The disc is loaded upside down	Check that the disc is loaded correctly.
Playback error. Please remove the disc.	Electrical or mechanical	• Replace the disc. • Set the ACC to Off and then set it to On again.
Region code cannot be matched (**DIFFERENT REGION DISC**)	The disc does not have the same region number as the navigation system.	Replace the DVD-Video with one bearing the correct region number.
Unreadable disc	This type of disc cannot be played by the navigation system.	Replace the disc with one the navigation system can play. (Page 214)
Playback error due to irregular temperature. Please remove the disc. (**THERMAL PROTECTION IN MOTION**)	The temperature of the navigation system is out of the normal operating range.	Wait until the unit's temperature returns to within normal operating limits.
ERROR-FF-FF	Undefined error	Set the ACC to Off and then set it to On again.
Tracks that cannot be played back will be skipped (**FILE SKIPPED**)	Files that are protected by digital rights management (DRM).	The protected files are skipped.
Cannot play back all tracks (**PROCETED DISC**)	All the files on the inserted disc are secured by DRM.	Replace the disc.
Flash writing error. Impossible to write on the flash. (**CAN NOT SAVE DATA**)	The playback history for VOD contents cannot be saved for some reason.	• Retry. • If the message appears frequently, consult your dealer.
Authorization Error (**AUTHORIZATION ERROR**)	The device does not match the device registered with the VOD provider. VOD content cannot be played back.	Check whether this device has been registered with the VOD provider.
Cannot play back HD file (**FILE NOT PLAYABLE-HIGH DEF**)	High definition (HD) DivX video cannot be played.	Create playable one and retry.

SD/USB/iPod

Message	Cause	Action (Reference)
Tracks that cannot be played back will be skipped	Files that are protected by digital rights management (DRM).	The protected files are skipped.
	This type of file cannot be played by this unit.	Replace it with the playable file. (Page 199)

Message	Cause	Action (Reference)
Cannot play back all tracks	All the files on the inserted external storage device are secured by DRM.	Store playable files.
	All of the files cannot be played by this unit.	Replace it with the playable file. (Page 199)
USB flash drive was disconnected for device protection. Do not connect this USB flash drive to the unit. To restart USB, restart the unit.	The USB connector or USB cable is short-circuited.	Confirm that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than 500 mA (maximum allowable current).	Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device.
	The USB interface cable for iPod is short-circuited.	Confirm that USB interface cable for iPod or USB cable is not caught in something or damaged.
Authorization failure. iPod is not connected.	The iPod is not compatible with this navigation system.	Use an iPod of a compatible version.
	Communication failure	• Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. • If the message appears frequently, consult your dealer.
iPod VR Dictionary being created. Please wait.	iPod function is restricted because the navigation system is trying to acquire the information needed to operate iPod with voice commands from the iPod currently connected.	• Wait on the iPod basic screen (**Music**) until "**iPod VR Dictionary updated**" appears. • Switch the screen to another screen to cancel the acquiring process. (In such case, the acquiring process will resume when the iPod basic screen (**Music**) is displayed.) (Page 164)
Creating iPod VR dictionary. Some iPod commands are unavailable during this process.	Voice operation is restricted because the navigation system is trying to acquire the information needed to operate iPod with voice commands from the iPod currently connected.	• Wait on the iPod basic screen (**Music**) until "**iPod VR Dictionary updated**" appears. • Switch the screen to another screen to cancel the acquiring process. (In such case, the acquiring process will resume when the iPod basic screen (**Music**) is displayed.) (Page 164)

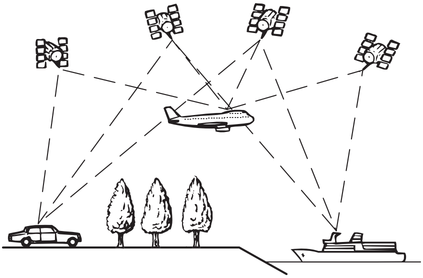
■

Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21 000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by "Dead Reckoning"

The built-in sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the "Gyrosensor" and inclination of the road with the "G sensor".

The built-in sensor can even calculate changes of altitude, and corrects for discrepancies in the distance traveled caused by driving along winding roads or up slopes.

If you use this navigation system with connecting the speed pulse, the system will become more accurate than no connection of speed pulse. So you connect the speed pulse without fail to get the accuracy of positioning.

- ❒ The position of the speed detection circuit vary depending on the vehicle model. For details, consult your authorized Pioneer dealer or an installation professional.
- ❒ Some types of vehicles may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your vehicle may not be displayed correctly while in traffic congestion or in a parking lot.

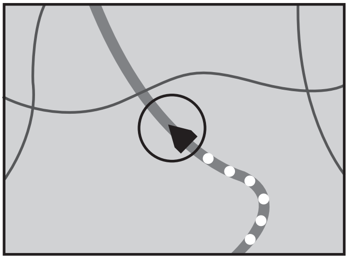
How do GPS and "Dead Reckoning" work together?

For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of built-in sensor. However, if only the data from the built-in sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the built-in sensor and used to correct it for improved accuracy.

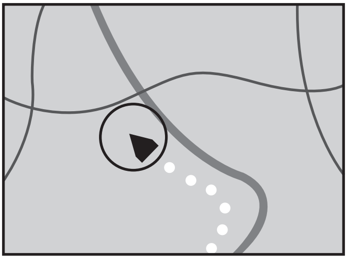
- ❒ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. Initialize the sensor status and it may recover the accuracy to normal condition.
  - ➲ For details, refer to *Clearing status* on page 95.

Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



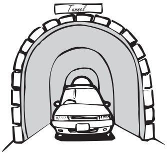
Without map matching

Handling large errors

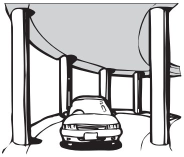
Positioning errors are kept to a minimum by combining GPS, “Dead Reckoning” and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When positioning by GPS is impossible

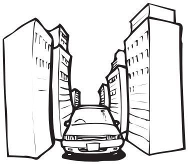
- GPS positioning is disabled if signals cannot be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



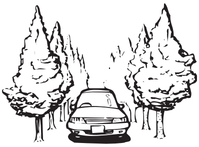
In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

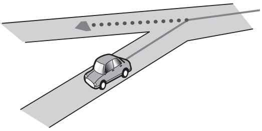
- If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
- Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.

❐ If a GPS signal has not been received for a long time, your vehicle’s actual position and the current position mark on the map may diverge considerably or may not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

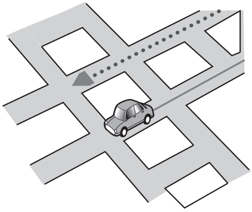
Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are traveling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

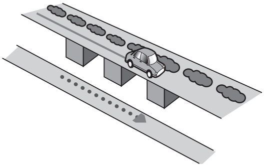
- If you make a shallow turn.



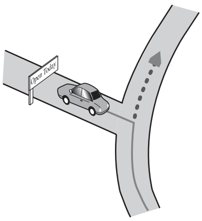
- If there is a parallel road.



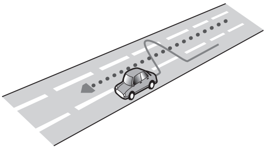
- If there is another road very nearby, such as in the case of an elevated freeway.



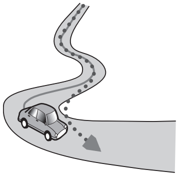
- If you take a recently opened road that is not on the map.



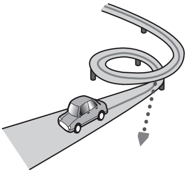
- If you drive in zigzags.



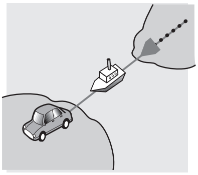
- If the road has a series of hairpin bends.



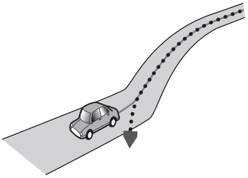
- If there is a loop or similar road configuration.



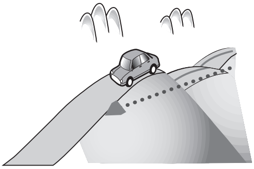
- If you take a ferry.



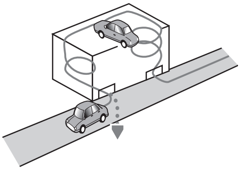
- If you are driving on a long, straight road or a gently curving road.



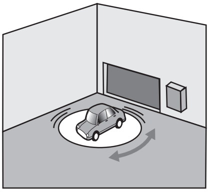
- If you are on a steep mountain road with many height changes.



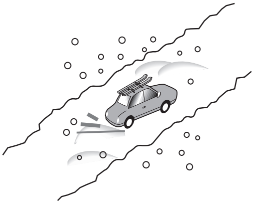
- If you enter or exit a multi-storey parking lot or similar structure using a spiral ramp.



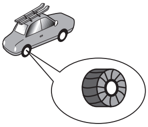
- If your vehicle is turned on a turntable or similar structure.



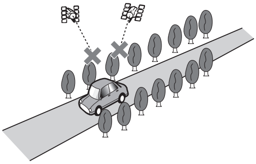
- If your vehicle's wheels spin, such as on a gravel road or in snow.



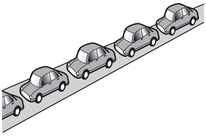
- If you put on chains, or change your tires for ones with a different size.



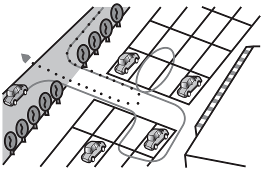
- If trees or other obstacles block the GPS signals for a considerable period.



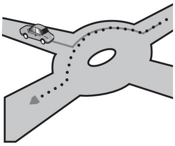
- If you drive very slowly, or in a start-and-stop manner, as in a traffic congestion.



- If you join the road after driving around a large parking lot.



- When you drive around a traffic circle.



- When starting driving immediately after starting the engine. ■

Route setting information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

Appendix

⚠ CAUTION

When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is considered. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

- The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.
- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic congestion ahead, a detour route may not be suggested if driving through the traffic congestion would still be better than taking the detour.
- There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.
- The number of traffic circle exits displayed on the screen may differ from the actual number of roads.

Route highlighting

- Once set, the route is highlighted in bright color on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Auto reroute function

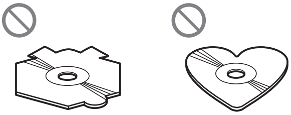
- If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.
- This function may not work under certain conditions. ■

Handling and care of discs

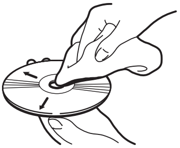
Some basic precautions are necessary when handling your discs.

Built-in drive and care

- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built-in drive.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a disc, wipe it with a soft cloth, moving outward from the center.



- Condensation may temporarily impair the built-in drive's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

Ambient conditions for playing a disc

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
- Despite our careful design of the product, small scratches that do not affect actual operation may appear on the disc surface as a result of mechanical wear, ambient conditions for use or handling of the disc. This is not a sign of the malfunction of this product. Consider it to be normal wear and tear. ■

Playable discs

DVD-Video and CD

DVD and CD discs that display the logos shown below generally can be played on this built-in DVD drive.

DVD-Video

CD

❒ DVD is a trademark of DVD Format/Logo Licensing Corporation.

❒ It is not possible to play DVD-Audio discs. This DVD drive may not be able to play all discs bearing the marks shown above.

AVCHD recorded discs

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs. If inserted, the disc may not be ejected.

Playing DualDisc

- DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this navigation system. However, since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this navigation system.
- Frequent loading and ejecting of a DualDisc may result in scratches to the disc.
- Serious scratches can lead to playback problems on this navigation system. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this navigation system.
- Please refer to the manufacturer for more detailed information about DualDiscs.

Dolby Digital

AVIC-Z110BT will down-mix Dolby Digital signals internally and the sound will be output in stereo. (Equipped with optical output for future extension.)

❒ Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

DTS sound

DTS audio format cannot be output, so select an audio track other than DTS audio format. “DTS” is registered trademarks of DTS, Inc. ■

Detailed information for playable media

Compatibility

Common notes about disc compatibility

- Certain functions of this product may not be available for some discs.
- Compatibility with all discs is not guaranteed.
- It is not possible to playback DVD-ROM/ DVD-RAM discs.
- Playback of discs may become impossible with direct exposure to sunlight, high temperatures, or depending on the storage conditions in the vehicle.

DVD-Video discs

- DVD-Video discs that have incompatible region numbers cannot be played on this DVD drive. The region number of the player can be found on this product’s chassis.

DVD-R/DVD-RW/DVD-R DL (Dual Layer) discs

- Unfinalized discs which have been recorded with the Video format (video mode) cannot be played back.
- Discs which have been recorded with the Video Recording format (VR mode) can be played back. However, unfinalized discs may not be played back. Unplayable discs should be finalized.
- DVD-R DL (Dual Layer) discs which have been recorded with Layer Jump recording cannot be played back.
- For more information about recording mode, please contact the manufacturer of media, recorders, or writing software.
- The following logo indicates that this unit is compatible with DVD-RW discs which have been recorded with the Video Recording format (VR mode).

RW
COMPATIBLE

CD-R/CD-RW discs

- Unfinalized discs cannot be played back.
- It may not be possible to playback CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built-in drive.
- Playback of discs recorded on a personal computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For more details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the external storage device (USB, SD)

- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Depending on the kind of the external storage device (USB, SD) you use, this navigation system may not recognize the storage device or files may not be played back properly.
- The text information of some audio and video files may not be correctly displayed.
- File extensions must be used properly.
- There may be a slight delay when starting playback of files on an external storage device (USB, SD) with complex folder hierarchies.
- Operations may vary depending on the kind of an external storage device (USB, SD).
- It may not be possible to play some music files from SD or USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

USB storage device compatibility

➲ For more details about USB storage device compatibility with this navigation system, refer to *Specifications* on page 214.

Protocol: bulk

- You cannot connect a USB storage device to this navigation system via a USB hub.
- Partitioned USB memory is not compatible with this navigation system.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or gas pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this navigation system may generate noise on the radio.
- Do not connect anything other than the USB memory device.

The sequence of audio files on USB memory

For USB memory, the sequence is different from that of USB memory device.

SD memory card and SDHC memory card

❒ For more details about SD memory card compatibility with this navigation system, refer to *Specifications* on page 214.

Appendix

Handling guidelines and supplemental information

- This system is not compatible with Multi Media Card (MMC).
- Copyright protected files cannot be played back.

Notes specific to DivX files

- Only DivX files downloaded from DivX partner sites are guaranteed for proper operation. Unauthorized DivX files may not operate properly.
- DRM rental files cannot be operated until playing back is started.
- The navigation system corresponds to a DivX file display of up to 1 590 minutes 43 seconds. Search operations beyond this time limit are prohibited.
- DivX VOD file playback requires supplying the ID code of this navigation system to the DivX VOD provider. Regarding the ID code, refer to *Displaying your DivX VOD registration code* on page 165.
- Plays all versions of DivX video (including DivX 6) with standard playback of DivX media files.
- For more details about DivX, visit the following site:
  http://www.divx.com/

DivX subtitle files

- Srt format subtitle files with the extension ".srt" can be used.
- Only one subtitle file can be used for each DivX file. Multiple subtitle files cannot be associated.
- Subtitle files that are named with the same character string as the DivX file before the extension are associated with the DivX file. The character strings before the extension must be exactly the same. However, if there is only one DivX file and one subtitle file in a single folder, the files are associated even if the file names are not the same.
- The subtitle file must be stored in the same folder as the DivX file.
- Up to 255 subtitle files may be used. Any more subtitle files will not be recognized.
- Up to 64 characters can be used for the name of the subtitle file, including the extension. If more than 64 characters are used for the file name, the subtitle file may not be recognized.
- The character code for the subtitle file should comply with ISO-8859-1. Using characters other than ISO-8859-1 may cause the characters to be displayed incorrectly.
- The subtitles may not be displayed correctly if the displayed characters in the subtitle file include control code.
- For materials that use a high transfer rate, the subtitles and video may not be completely synchronized.
- If multiple subtitles are programed to display within a very short time frame, such as 0.1 seconds, the subtitles may not be displayed at the correct time.

Media compatibility chart

General

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File system	ISO9660 level 1, ISO9660 level 2, Romeo and Joliet	ISO9660 level 1, ISO9660 level 2, Romeo, Joliet and UDF 1.02	FAT16/FAT32	
Maximum number of folders	700		300	
Maximum number of files	999	3 500	2 500	
Playable file types	MP3, WMA, AAC, DivX		MP3, WMA, AAC, WAV, AVI, WMV, MPEG-4	

Notes:
Maximum playback time of audio file stored in the external storage device (USB, SD): 7.5 h (450 minutes)

MP3 compatibility

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File extension	.mp3			
Bit rate	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)		8 kHz to 48 kHz	
ID3 tag	ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3		ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4	

Notes:
- Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
- The navigation system is not compatible with the following:
  MP3i (MP3 interactive), mp3 PRO, m3u playlist

WMA compatibility

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File extension	.wma			
Bit rate	5 kbps to 320 kbps (CBR), VBR			
Sampling frequency	8 kHz to 48 kHz			

Note:
The navigation system is not compatible with the following:
Windows Media™ Audio 9 Professional, Lossless, Voice

Appendix

WAV compatibility

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File extension	WAV files on the CD-R/-RW, DVD-R/-RW/-R DL cannot be played.		.wav	
Format			Linear PCM (LPCM), IMA-ADPCM	
Sampling frequency			LPCM: 16 kHz to 48 kHz IMA-ADPCM: 22.05 kHz and 44.1 kHz	
Quantization bits			LPCM: 8 bits and 16 bits MS ADPCM: 4 bits	
Note: The sampling frequency shown in the display may be rounded.				

AAC compatibility

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File extension	.m4a			
Bit rate	8 kbps to 320 kbps (CBR)			
Sampling frequency	8 kHz to 44.1 kHz		8 kHz to 18 kHz	
Note: The navigation system plays back AAC files encoded by iTunes.				

DivX compatibility

Media	CD-R/-RW	DVD-R/-RW/-R DL	USB storage device	SD memory card
File extension	.avi/.divx		DivX files on the external storage device (USB, SD) cannot be played.	
Profile (DivX version)	Home Theater Ver. 3.11/Ver. 4.x/Ver. 5.x/ Ver. 6.x			
Compatible audio codec	MP3, Dolby Digital			
Bit rate (MP3)	8 kbps to 320 kbps (CBR), VBR			
Sampling frequency (MP3)	16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)			
Maximum image size	720 pixels × 576 pixels			
Maximum file size	4 GB			

Notes:
- The navigation system is not compatible with the following:
  DivX Ultra format, DivX files without video data, DivX files encoded with LPCM (Linear PCM) audio codec
- Depending on the file information composition, such as the number of audio streams, there may be a slight delay in the start of playback on discs.
- If a file contains more than 4 GB, playback stops before the end.
- Some special operations may be prohibited because of the composition of DivX files.
- Files with high transfer rates may not be played back correctly. The standard transfer rate is 4 Mbps for CDs and 10.08 Mbps for DVDs.

Video files compatibility (USB, SD)

File extension	.avi	.mp4		.m4v	.wmv
Format	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible video codec	MPEG-4	MPEG-4	H.264	MPEG-4	WMV
Compatible audio codec	Linear PCM (LPCM), IMA-ADPCM MP3	AAC	AAC	AAC	WMA
Recommended video specifications	Image size: QVGA (320 pixels x 240 pixels) Bit rate: 768 kbps Frame rate: 30 fps	Image size: QVGA (320 pixels x 240 pixels) Bit rate: 768 kbps Frame rate: 30 fps	Image size: QVGA (320 pixels x 240 pixels) Bit rate: 384 kbps Frame rate: 30 fps	Image size: QVGA (320 pixels x 240 pixels) Bit rate: 768 kbps Frame rate: 30 fps	Image size: QVGA (320 pixels x 240 pixels) Bit rate: 384 kbps Frame rate: 30 fps
Maximum file size	2 GB				
Maximum playback time	150 minutes				

Appendix

Common notes

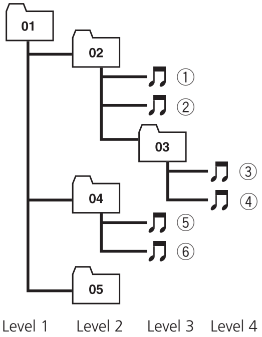
- The navigation system may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media™ Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- The navigation system is not compatible with packet write data transfer.
- This navigation system can recognize up to 32 characters, beginning with the first character, including extension for the file and folder name. Depending on the display area, the navigation system may try to display them with a reduced font size. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

📁: Folder

♫: File



Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (A blank list will appear.) Also, these folders will be skipped without displaying the folder number. ■

Bluetooth

Bluetooth®

Bluetooth is a short-range wireless radio connectivity technology that is developed as a cable replacement for cellular phones, handheld PCs and other devices. Bluetooth operates in 2.4 GHz frequency range and transmits voice and data at speeds up to 1 megabit per second. Bluetooth was launched by a special interest group (SIG) comprising Ericsson Inc., Intel Corp., Nokia Corp., Toshiba and IBM in 1998, and it is currently developed by nearly 2 000 companies worldwide.

- The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under license. Other trademarks and trade names are those of their respective owners. ■

About the SAT RADIO READY Logo

The SAT RADIO READY logo indicates that the Satellite Radio Tuner for Pioneer (i. e., XM tuner and Sirius satellite tuner which are sold separately) can be controlled by this navigation system. Please inquire with your dealer or nearest authorized Pioneer service station regarding the satellite radio tuner that can be connected to this navigation system.

Note:

The system will use direct satellite-to-receiver broadcasting technology to provide listeners in their cars and at home with crystal-clear sound seamlessly from coast to coast. Satellite radio will create and package over 100 channels of digital- quality music, news, sports, talk and children’s programming.

“SAT Radio”, the SAT Radio logo and all related marks are trademarks of Sirius Satellite Radio inc., and XM Satellite Radio Inc. ■

HD Radio™ Technology

HD Radio™ and the HD and HD Radio Ready logos are proprietary trademarks of iBiquity Digital Corporation. ■

SD and SDHC logo

SD Logo is a trademark of SD-3C, LLC.

SDHC Logo is a trademark of SD-3C, LLC. ■

WMA/WMV

Windows Media™ and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. ■

DivX

Appendix

DivX is a compressed digital video format created by the DivX video codec from DivX, Inc. This unit can play DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called “Titles”. When naming files/titles on a CD-R/RW or a DVD-R/RW disc prior to burning, keep in mind that by default they will be played in alphabetical order.

For U.S.A.
DivX® is a registered trademark of DivX, Inc., and is used under license.

For Canada
DivX™ is a registered trademark of DivX, Inc., and is used under license.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.
ABOUT DIVX VIDEO-ON-DEMAND: This DivX® Certified device must be registered in order to play DivX Video-on-Demand (VOD) content. To generate the registration code, locate the DivX VOD section in *Displaying your DivX VOD registration code*. Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD.

➲ For details, refer to *Displaying your DivX VOD registration code* on page 165. ■

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes version 7.7. ■

Detailed information regarding connectable iPods

⚠ CAUTION

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using the navigation system.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or gas pedal.

For details, refer to the iPod’s manuals.

iPod

Made for iPod

“Made for iPod” means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.
Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.
iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

iPhone

"Works with iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards.
Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.
iPhone is a trademark of Apple Inc.

iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries. ■

Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this navigation system, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in "*Specifications*".
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the Touch panel functions. The LCD screen can scratch easily.

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the navigation unit, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or colored stripes.

Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.

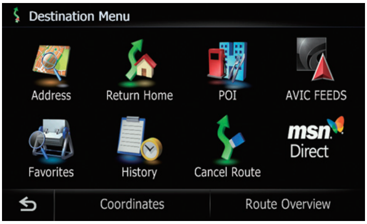
Appendix

- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorized PIONEER Service Station. ■

Appendix

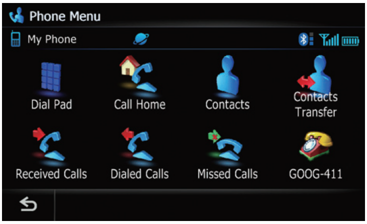
Display information

Destination Menu


Destination Menu
Address
Return Home
POI
AVIC FEEDS
Favorites
History
Cancel Route
msn Direct
Coordinates
Route Overview

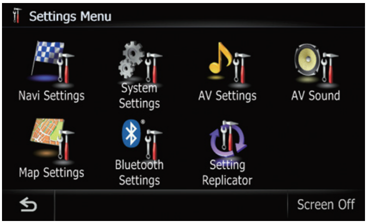
		Page
[**Address**]		57
[**Return Home**]		59
[**POI**]		
	[**Gas Station**]	60
	[**ATM**]	
	[**Coffee**]	
	[**Hotel**]	
	[**Spell Name**]	60
	[**Near Me**]	60
	[**Near Destination**]	61
	[**Around City**]	61
[**AVIC FEEDS**]		62
[**Favorites**]		61, 64
[**History**]		62, 67
[**Cancel Route**]		56
[**MSN Direct**]		68
[**Coordinates**]		62
[**Route Overview**]		54

Phone Menu


Phone Menu
My Phone
Dial Pad
Call Home
Contacts
Contacts Transfer
Received Calls
Dialed Calls
Missed Calls
GOOG-411

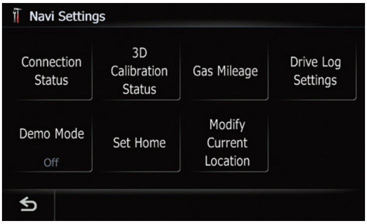
	Page
[**Dial Pad**]	84
[**Call Home**]	85
[**Contacts**]	85
[**Contacts Transfer**]	89
[**Received Calls**]	85
[**Dialed Calls**]	86
[**Missed Calls**]	86
[**GOOG-411**]	87

Settings Menu


Settings Menu
Navi Settings
System Settings
AV Settings
AV Sound
Map Settings
Bluetooth Settings
Setting Replicator
Screen Off

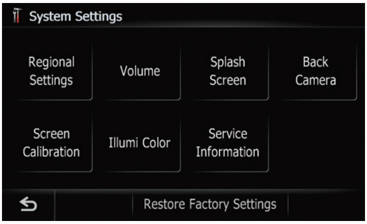
	Page
[**Navi Settings**]	94
[**System Settings**]	98
[**AV Settings**]	162
[**AV Sound**]	165
[**Map Settings**]	44
[**Bluetooth Settings**]	89
[**Setting Replicator**]	103

Navi Settings menu


Navi Settings
Connection Status
3D Calibration Status
Gas Mileage
Drive Log Settings
Demo Mode
Off
Set Home
Modify Current Location

	Page
[**Connection Status**]	94
[**3D Calibration Status**]	94
[**Gas Mileage**]	96
[**Drive Log Settings**]	97
[**Demo Mode**]	98
[**Set Home**]	98
[**Modify Current Location**]	98

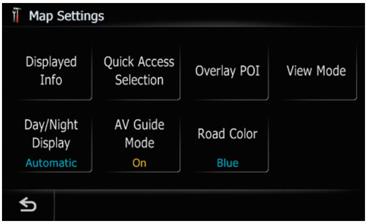
System Settings menu


System Settings
Regional Settings
Volume
Splash Screen
Back Camera
Screen Calibration
Illumi Color
Service Information
Restore Factory Settings

		Page
[**Regional Settings**]		
	[**Program Language**], [**Voice Language**]	99
	[**Time**]	99
	[**km / mile**]	100
	[**Speed**]	100
[**Volume**]		100
[**Splash Screen**]		101
[**Back Camera**]		101
[**Screen Calibration**]		102
[**Illumi Color**]		103
[**Service Information**]		103
[**Restore Factory Settings**]		178

Appendix

Map Settings menu


Map Settings
Displayed Info
Quick Access Selection
Overlay POI
View Mode
Road Color

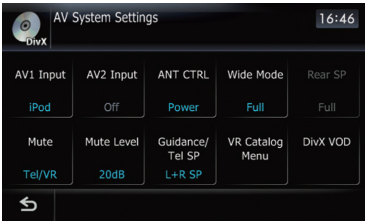
Day/Night Display Automatic

AV Guide Mode On

Road Color Blue

	Page
[**Displayed Info**]	
[**Close Up View**]	44
[**City Map**]	44
[**City Map Barrier**]	44
[**Show Traffic Incident**]	45
[**Bluetooth Connected**]	45
[**Current Street Name**]	45
[**Favorites Icon**]	45
[**3D Land Mark**]	45
[**Show Manuever**]	45
[**MSN Direct**]	46
[**Quick Access Selection**]	49
[**Overlay POI**]	46
[**View Mode**]	47
[**Day/Night Display**]	48
[**AV Guide Mode**]	49
[**Road Color**]	48

AV System Settings menu


DivX
AV System Settings
16:46
VR Catalog Menu
DivX VOD

AV1 Input iPod

AV2 Input Off

ANT CTRL Power

Wide Mode Full

Rear SP Full

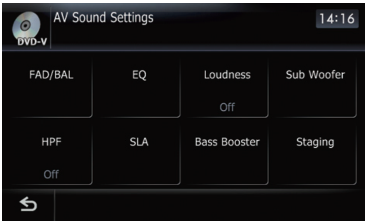
Mute Tel/VR

Mute Level 20dB

Guidance/ Tel SP L+R SP

	Page
[**AV1 Input**]	162
[**AV2 Input**]	162
[**ANT CTRL**]	162
[**Wide Mode**]	163
[**Rear SP**]	163
[**Mute**]	163
[**Mute Level**]	164
[**Guidance/Tel SP**]	164
[**VR Catalog Menu**]	164
[**DivX VOD**]	165

AV Sound Settings menu

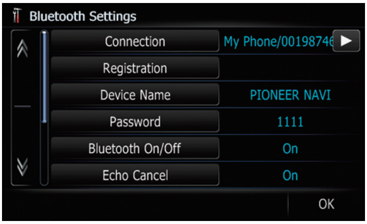

DVD-V
AV Sound Settings
14:16
FAD/BAL
EQ
Bass Booster
Sub Woofer
SLA
Staging

Loudness Off

HPF Off

	Page
[**FAD/BAL**] ([**Balance**])	166
[**EQ**]	166
[**Loudness**]	168
[**Sub Woofer**]	168
[**HPF**]	168
[**SLA**]	168
[**Bass Booster**]	169
[**Staging**]	169

Bluetooth Settings menu


Bluetooth Settings
Registration
OK

Connection My Phone/00198746

Device Name PIONEER NAVI

Password 1111

Bluetooth On/Off On

Echo Cancel On

	Page
[**Connection**]	82
[**Registration**]	79
[**Device Name**]	90
[**Password**]	90
[**Bluetooth On/Off**]	90
[**Echo Cancel**]	90
[**Auto Answer Preference**]	90
[**Refuse All Calls**]	91
[**Clear Memory**]	91
[**Firmware update**]	91

Glossary

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4.

Aspect ratio

This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Built-in sensor

The built-in sensor that enables the system to estimate your vehicle’s position.

CD-DA

This stands for a general music CD (commercial-release audio CD). In this manual, this word is sometime used for a distinction between data CDs (which include compressed audio files) and general music CDs.

Chapter

Titles of DVD-Video or DVD-VR are in turn divided into chapters which are numbered in the same way as the chapters of a book. With discs featuring chapters, you can quickly find a desired scene with chapter search.

Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Destination

A location you choose as the end point of your journey.

DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

DivX Certified

DivX Certified products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, including DivX 6.

Favorites

A frequently visited location (such as your workplace or a relative’s home) that you can register to allow easy routing.

GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance mode

The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point

These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

Home location

Your registered home location.

Appendix

ID3 tag

This is a method of embedding track-related information in an MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

ISO9660 format

This is the international standard for the format logic of DVD/CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels:

- **Level 1:**
  The file name is in 8.3 format (the name consists of up to eight characters, half-byte English capital letters, half-byte numerals and the "_" sign, with a file-extension of three characters).
- **Level 2:**
  The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than eight hierarchies.
- **Extended formats**
  Joliet:
  File names can have up to 64 characters.
  Romeo:
  File names can have up to 128 characters.

JPEG

This stands for Joint Photographic Experts Group, and is an international still image compression standard.

MP3

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Organization for Standardization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

MPEG

This stands for Moving Pictures Experts Group, and is an international video image compression standard.

Multi-angle

With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

Multi-audio (Multilingual dialog)

Some videos feature dialog recorded in multiple languages or audio recorded in multiple tracks. For example, dialog in up to eight languages can be recorded on a single DVD-Video, letting you choose the language as desired.

Multi-session

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than two sessions in one disc.

Multi-subtitle

For example, subtitles in up to 32 languages can be recorded on a single DVD-Video, letting you choose as desired.

Packet write

This is a general term for a method of writing individual files to a CD-R, etc. whenever required, just as is done with files on floppy or hard disks.

Parental lock
Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

Phone book
An address book on user's phone is collectively referred to as "Phone book". Depending on the cellular phone, the "Phone book" may be called a name such as "Contacts", "Business card" or something else.

Point of Interest (POI)
Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

Region number
DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player.

Route setting
The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

Set route
The route marked out by the system to your destination. It is highlighted in bright color on the map.

Title
DVD-Video or DVD-VR discs have a high data capacity, enabling recording of multiple videos on a single disc. If, for example, one disc contains three separate videos, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

Track log
Your navigation system logs routes that you already passed through if the track logger is activated. This recorded route is called a "track log". It is handy when you want to check a route traveled or if returning along a complex route.

VBR
VBR is short for variable bit rate. Generally speaking, CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression-priority sound quality.

Voice guidance
The giving of directions by navigation voice while in guidance.

Waypoint
A location that you choose to visit before your destination; a journey can be built up from multiple waypoints and the destination.

WMA
WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation. ■

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 10.8 V to 15.1 V DC)
Grounding system	Negative type
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
Chassis	178 mm × 100 mm × 165 mm (7 in. × 3-7/8 in. × 6-1/2 in.)
Nose	170 mm × 96 mm × 17 mm (6-3/4 in. × 3-3/4 in. × 5/8 in.)
Weight	2.43 kg (5.3 lbs)
NAND flash memory	4 GB

Navigation

GPS Receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	32-channel multi-channel reception system
Reception frequency	1 575.42 MHz
Sensitivity	–143 dBm (typ)
Position update frequency	Approx. once per second
GPS antenna:	
Antenna	Micro strip flat antenna/ right-handed helical polarization
Antenna cable	5.0 m (16 ft. 5 in.)
Dimensions (W × H × D)	33 mm × 15 mm × 36 mm (1-1/4 in. × 5/8 in. × 1-3/8 in.)
Weight	96 g (0.2 lbs)

Display

Screen size/aspect ratio	7 inch wide/16:9 (effective display area: 159 mm × 84 mm)
Pixels	384 000 (800 × 480)
Display method	TFT Active matrix driving
Backlight	LED
Color system	NTSC compatible
Tolerable temperature range:	
Power on	+14 °F to +140 °F
Power off	–4 °F to +176 °F
Angle adjustment	0° to 22°

Audio

Maximum power output	50 W × 4 50 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for subwoofer)
Continuous power output	22 W × 4 (50 Hz to 15 kHz, 5 %THD, 4 Ω LOAD, Both Channels Driven)
Load impedance	4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch] allowable)
Preout output level (max)	4 V
Preout impedance	100 ohm
Equalizer (7-Band Graphic Equalizer):	
Frequency	50 Hz/125 Hz/315 Hz/800 Hz/ 2 kHz/5 kHz/12.5 kHz
Gain	±12 dB
Loudness contour:	
Low	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid	+10 dB (100 Hz), +6.5 dB (10 kHz)
High	+11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
HPF:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	–12 dB/oct
Subwoofer:	
Frequency	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope	–18 dB/oct
Gain	–24/+6 dB
Phase	Normal/Reverse
Bass boost:	
Gain	0 dB to +12 dB

DVD Drive

System	DVD-Video, CD, MP3, WMA, AAC, DivX system
Usable discs	DVD-Video, DVD-VR, DVD-R (DL), DVD-RW, CD-ROM, CD-DA, CD-R/RW
Region number	1
Signal format:	
Sampling frequency	44.1 kHz/48 kHz/96 kHz
Number of quantization bits	16 bit/20 bit/24 bit; linear
Frequency response	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	97 dB (1 kHz) (IHF-A network) (CD: 96 dB (1 kHz) (IHF-A network))

Appendix

Dynamic range	95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)
Output level:	
Video	1.0 Vp-p/75 Ω (±0.2 V)
Audio	1.0 V (1 kHz, 0 dB)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver.9.0 L3
AAC decoding format	MPEG-4 AAC (only encoded by iTunes): .m4a
DivX decoding format	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X : .avi, .divx

USB

USB standard spec.	USB 2.0 High Speed
Max current supply	500 mA
Max memory capacity	16 GB
File system	FAT16, FAT32
USB class	Mass storage class
Decoding format	MP3/WMA/AAC/WAVE/H.264/MPEG4/WMV

SD

Compatible physical format	Version 2.00
Max memory capacity	16 GB
File system	FAT16, FAT32
Decoding format	MP3/WMA/AAC/WAVE/H.264/MPEG4/WMV

Bluetooth

Version	Bluetooth 2.0+EDR
Output power	+4 dBm Max. (Power class 2)

FM tuner

Frequency range	87.9 MHz to 107.9 MHz
Usable sensitivity	9 dBf (0.8 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio	72 dB (IHF-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 Hz to 15 000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range	530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity	25 µV (S/N: 20 dB)
Signal-to-noise ratio	62 dB (IHF-A network)

CEA2006 Specifications

Power output	14 W RMS × 4 Channels (4 Ω and ≦ 1 % THD+N)
S/N ratio	91 dBA (reference: 1 W into 4 Ω)

Note

Specifications and design are subject to possible modifications without notice due to improvements. ■

Register your product at

http://www.pioneerelectronics.com

in Canada **http://www.pioneerelectronics.ca**

See "Visit our website" page

PIONEER CORPORATION
1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0031, JAPAN

PIONEER ELECTRONICS (USA) INC.
P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.
TEL: (800) 421-1404

PIONEER EUROPE NV
Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium/Belgique
TEL: (0) 3/570.05.11

PIONEER ELECTRONICS ASIACENTRE PTE. LTD.
253 Alexandra Road, #04-01, Singapore 159936
TEL: 65-6472-7555

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.
5 Arco Lane, Heatherton, Victoria, 3202, Australia
TEL: (03) 9586-6300

PIONEER ELECTRONICS OF CANADA, INC.
300 Allstate Parkway, Markham, Ontario L3R 0P2, Canada
TEL: 1-877-283-5901
TEL: 905-479-4411

PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.
Blvd.Manuel Avila Camacho 138 10 piso
Col.Lomas de Chapultepec, Mexico, D.F. 11000
TEL: 55-9178-4270

先鋒股份有限公司
總公司：台北市中山北路二段44號13樓
電話：(02) 2521-3588

先鋒電子（香港）有限公司
香港九龍尖沙咀海港城世界商業中心9樓901-6室
電話：(0852) 2848-6488

Published by Pioneer Corporation.
Copyright © 2009 by Pioneer Corporation.
All rights reserved.

Printed in Thailand

<KKYZX> <10G00000>

<CRB3035-C/N> UC